CVRP

May 5, 2022

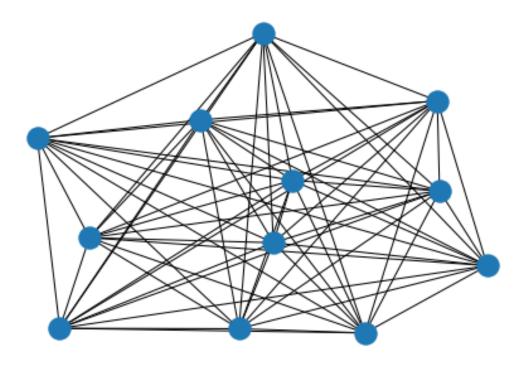
1 VRP Demo with SCIP

This file is intended to build the model for the CVRP using SCIP

```
[2]: # Create Graph
G = nx.complete_graph(12)
for (u, v) in G.edges():
    G.edges[u,v]['weight'] = random.randint(1,10)

for node in G.nodes():
    G.nodes()[node]['demand'] = random.randint(1,10)

nx.draw(G)
```



```
[3]: # Create Simple Graph for correctnes
G = nx.complete_graph(4)
G.remove_edge(0,3)
for (u, v) in G.edges():
    G.edges[u,v]['weight'] = 1
G.edges[1,2]['weight'] = 1

for node in G.nodes():
    G.nodes()[node]['demand'] = 1

# nx.draw(G,with_labels=True)
```

```
class VRP(Model):
    def __init__(self,graph):
        super().__init__()

        self.original_graph = graph
        self.graph = graph.copy()
        self.vars = {}
        self.cons = []
```

```
[4]: class VRPPricer(Pricer):
    def pricerinit(self):
```

```
self.data['cons'] = [self.model.getTransformedCons(con) for con in self.
 →model.cons]
       self.data['vars'] = {path:self.model.getTransformedVar(var) for_
 ⇔(path, var) in self.model.vars.items()}
       print(f" There are {len(self.model.getConss())} constraints in the
 →model and {len(self.data['cons'])} of them are known to the pricer.")
       node_data = list(nx.get_node_attributes(self.model.graph,"demand").
 →values())
       if not np.all(np.array(node_data)):
          print("PRICER_PY: The demands of all nodes must be > 0.")
       print(node_data)
       nodes_arr = ffi.cast("unsigned*", np.array(node_data).astype(np.uintc).
 ⇔ctypes.data)
       edges = nx.adjacency_matrix(self.model.graph,dtype=np.double).toarray()
       edges_arr = ffi.cast("double*", edges.ctypes.data)
       num_nodes = ffi.cast("unsigned",self.model.graph.number_of_nodes())
       capacity_ptr = ffi.cast("double",self.data['capacity'])
       labelling_lib.initGraph(num_nodes,nodes_arr,edges_arr, capacity_ptr)
   def pricerfarkas(self):
         print("Farkas Pricing has been called.")
#
       dual = [self.model.getDualfarkasLinear(con) for con in self.

data['cons']]

       print(f"Farkas Values are {dual}")
       return self.labelling(dual, farkas=True)
   def pricerredcost(self):
       pi = [self.model.getDualsolLinear(con) for con in self.data['cons']]
       print(f"Dual variables are {pi}")
       return self.labelling(pi)
   def labelling(self, dual,farkas=False):
       pointer_dual = ffi.cast("double*", np.array(dual,dtype=np.double).
 ⇔ctypes.data)
       # TODO: Possible improvement: result can be reused every time
       result = np.zeros(self.data['capacity'] + 10,dtype=np.uintc)
        # Should be capacity + 2, but I gave it a little more room
       result_arr = ffi.cast("unsigned*",result.ctypes.data)
       labelling_lib.labelling(pointer_dual, False,result_arr)
```

```
print("There are no paths with negative reduced costs")
                 # There are no paths with negative reduced costs
                 return {'result':SCIP_RESULT.SUCCESS}
             print(result)
             result_indices = np.insert(np.nonzero(result),0,0)
               print(np.insert(np.nonzero(result),0,0))
             path = tuple(result[result_indices])
             print(f"Labelling found path {path} with negative reduced cost")
             if path in self.data['vars'].keys():
                 cost = self.model.getVarRedcost(self.data['vars'][path])
                 print(f"Path already in variables with reduced cost {cost} with ⊔

¬farkas {farkas}.")
                 return {'result':SCIP_RESULT.SUCCESS}
             var = self.model.addVar(vtype="I",obj=nx.path_weight(self.model.

¬graph,path,"weight"),pricedVar=True)
             weight = nx.path_weight(self.model.graph,path,"weight")
             print(f"Added {path} with path weight {weight}")
             counts = np.unique(path[1:-1], return_counts=True)
             for i, node in enumerate(counts[0]):
                 print(f"There are {counts[1][i]} occurences of node {node}")
                 self.model.addConsCoeff(self.data['cons'][node-1], var_
      →, counts[1][i])
             self.model.addConsCoeff(self.data['cons'][-1], var, 1)
             self.data['vars'][tuple(path)] = var
             return {'result':SCIP_RESULT.SUCCESS}
[5]: model = VRP(G)
     num_vehicles = 12
     # Create pricer
     pricer = VRPPricer()
     pricer.data = {}
     pricer.data["capacity"] = 30
     pricer.data["num_vehicles"] = num_vehicles
     model.includePricer(pricer, "pricer", "does pricing")
     # Create a valid set of variables and the constraints to it
     for i in range(1,G.number_of_nodes()-1):
         path = (0,i,G.number_of_nodes()-1)
```

if(result[0] == 1):

cost = nx.path_weight(G,path,"weight")
var = model.addVar(vtype="I",obj=cost)

There are 11 constraints in the model and 11 of them are known to the pricer. [8, 10, 8, 7, 6, 5, 5, 5, 5, 6, 4]

Dual variables are [14.0, 10.0, 9.0, 20.0, 12.0, 9.0, 17.0, 13.0, 11.0, 12.0, -0.0] Graph data successfully copied to C.

PRICER_C: Capacity is 30 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 16 Path is currently at node 4 with load 6 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER C: Found path with load 16 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 14 Path is currently at node 4 with load 6 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5

PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 PRICER_C: Found path with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 13 Path is currently at node 8 with load 5 PRICER C: Found path with load 13 Path is currently at node 9 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 13 Path is currently at node 4 with load 6 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER C: Found path with load 16 Path is currently at node 1 with load 10 PRICER_C: Found path with load 14 Path is currently at node 2 with load 8 PRICER_C: Found path with load 13 Path is currently at node 3 with load 7 PRICER_C: Found path with load 11 Path is currently at node 5 with load 5 PRICER_C: Found path with load 11 Path is currently at node 6 with load 5 PRICER_C: Found path with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 11 Path is currently at node 8 with load 5 PRICER C: Found path with load 11 Path is currently at node 9 with load 5 PRICER C: Found path with load 12 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 13 Path is currently at node 2 with load 8 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 11 Path is currently at node 4 with load 6 PRICER_C: Found path with load 10 Path is currently at node 6 with load 5

PRICER_C: Found path with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 10 Path is currently at node 9 with load 5 PRICER C: Found path with load 11 Path is currently at node 10 with load 6 PRICER C: Found path with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 12 Path is currently at node 1 with load 10 PRICER_C: Found path with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 9 Path is currently at node 3 with load 7 PRICER_C: Found path with load 8 Path is currently at node 4 with load 6 PRICER_C: Found path with load 7 Path is currently at node 5 with load 5 PRICER_C: Found path with load 7 Path is currently at node 6 with load 5 PRICER_C: Found path with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 7 Path is currently at node 9 with load 5 PRICER_C: Found path with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8

PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 2 with load 8 Path is currently at node 4 with load 6 PRICER C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 7 with load 2 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5

PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 20 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 4 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 17 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5

```
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 20
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 4 with load 6
Path is currently at n[ 0 1 4 5 6 11 0 0 0 0 0 0 0 0 0 0 0 0
```

```
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]ode 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 15
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 19
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 17
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 8 with 1
Labelling found path (0, 1, 4, 5, 6, 11) with negative reduced cost
Added (0, 1, 4, 5, 6, 11) with path weight 18
There are 1 occurences of node 1
There are 1 occurences of node 4
There are 1 occurences of node 5
There are 1 occurences of node 6
Dual variables are [14.0, 10.0, 9.0, 20.0, 12.0, -28.0, 17.0, 13.0, 11.0, 12.0,
-0.07
oad 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 13
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Path is currently at node 7 with load 2 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 16 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER C: Found path with load 15 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 4 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 13 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 17 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 14 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16

Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 13 Path is currently at node 7 with load 2 Path is currently at node 4 with load 6 PRICER_C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 13 Path is currently at node 4 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 13

Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 10 Path is currently at node 7 with load 2 Path is currently at node 4 with load 6 PRICER C: Found path with load 14 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 13 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER C: Found path with load 13 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 13 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 PRICER_C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 12 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 15 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8

```
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
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```
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
ERROR: Path length exceeds maximum. Current value of path_len is 33
PRICER C: Capacity is 30
PRICER_C: Found path with load 18
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
```

Path is currently at node 9 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 14 Path is currently at node 4 with load 6 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 PRICER_C: Found path with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER C: Found path with load 17 Path is currently at node 1 with load 10 PRICER C: Found path with load 13 Path is currently at node 4 with load 6 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 1 with load 10 PRICER_C: Found path with load 14 Path is currently at node 2 with load 8 PRICER_C: Found path with load 13 Path is currently at node 3 with load 7 PRICER C: Found path with load 11 Path is currently at node 5 with load 5 PRICER_C: Found path with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 11 Path is currently at node 8 with load 5 PRICER_C: Found path with load 11 Path is currently at node 9 with load 5 PRICER_C: Found path with load 12 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 13

Path is currently at node 2 with load 8 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 11 Path is currently at node 4 with load 6 PRICER C: Found path with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 11 Path is currently at node 10 with load 6 PRICER_C: Found path with load 12 Path is currently at node 1 with load 10 PRICER_C: Found path with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 9 Path is currently at node 3 with load 7 PRICER C: Found path with load 8 Path is currently at node 4 with load 6 PRICER C: Found path with load 7 Path is currently at node 5 with load 5 PRICER_C: Found path with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 7 Path is currently at node 9 with load 5 PRICER_C: Found path with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8

PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 24 Path is currently at node 2 with load 8 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 7 with load 2 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5

```
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5[ 0 1 4 5 4 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 1, 4, 5, 4, 11) with negative reduced cost
Added (0, 1, 4, 5, 4, 11) with path weight 23
There are 1 occurences of node 1
There are 2 occurences of node 4
There are 1 occurences of node 5
Dual variables are [14.0, 10.0, 9.0, -1.5, 12.0, -6.5, 17.0, 13.0, 11.0, 12.0,
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 10 with load 6
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 20
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
```

Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER C: Found path with load 14 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 13 Path is currently at node 7 with load 2 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 16 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 4 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5

Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 14 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 14 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 21 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 13 Path is currently at node 7 with load 2 Path is currently at node 4 with load 6 PRICER_C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 4 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5

Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 13 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 13 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 10 Path is currently at node 7 with load 2 Path is currently at node 4 with load 6 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 13 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 PRICER_C: Found path with load 12 Path is currently at node 5 with load 5

```
Path is currently at node 9 with load 5
PRICER_C: Found path with load 15
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 14
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
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```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
ERROR: Path length exceeds maximum. Current value of path_len is 33
PRICER_C: Capacity is 30
PRICER_C: Found path with load 18
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
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PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER C: Found path with load 16 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 PRICER_C: Found path with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 13 Path is currently at node 2 with load 8 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER C: Found path with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 11 Path is currently at node 10 with load 6 PRICER_C: Found path with load 12 Path is currently at node 1 with load 10 PRICER_C: Found path with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 9 Path is cu[0 2 10 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

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0 0 0 0 0 0 0 0 0 0 0 0 0 0] Labelling found path (0, 2, 10, 7, 9, 11) with negative reduced cost Added (0, 2, 10, 7, 9, 11) with path weight 14 rrently at node 3 with load 7 PRICER_C: Found path with load 7 Path is currently at node 5 with load 5 PRICER_C: Found path with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 7 Path is currently at node 9 with load 5 PRICER_C: Found path with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 13 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 PRICER C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is cThere are 1 occurences of node 2
urrently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at There are 1 occurences of node 7
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [14.0, 10.0, 9.0, -1.5, 12.0, -6.5, 17.0, 13.0, 11.0, -24.0,
-0.0]
node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
```

Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 17 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 4 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER C: Found path with load 14 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER_C: Found path with load 17 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 14 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER C: Found path with load 12 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 16 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 14 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 13 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5

```
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
```

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
```

```
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found pa[ 0 7 8 7 4 11 0
                                       0 0
                                             0 0 0 0 0 0 0 0 0 0
0 0 0 0
 0 0 0]th with load 25
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently
Labelling found path (0, 7, 8, 7, 4, 11) with negative reduced cost
```

```
Added (0, 7, 8, 7, 4, 11) with path weight 35
There are 1 occurences of node 4
There are 2 occurences of node 7
There are 1 occurences of node 8
Dual variables are [14.0, 10.0, 9.0, -1.5, 12.0, -6.5, 11.75, 13.0, 11.0,
-18.75, -0.0]
at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
ERROR: Path length exceeds maximum. Current value of path len is 33
PRICER_C: Capacity is 30
PRICER C: Found path with load 18
Path is currently at node 2 with load 8
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
```

Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 13 Path is currently at node 2 with load 8 PRICER C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 12 Path is currently at node 1 with load 10 PRICER_C: Found path with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 9 Path is currently at node 3 with load 7 PRICER C: Found path with load 7 Path is currently at node 5 with load 5 PRICER C: Found path with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 7 Path is currently at node 9 with load 5 PRICER_C: Found path with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27

```
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is cur[ 0 2 7 5 6 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
rently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found paLabelling found path (0, 2, 7, 5, 6, 11) with negative reduced
Added (0, 2, 7, 5, 6, 11) with path weight 20
There are 1 occurences of node 2
There are 1 occurences of node 5
There are 1 occurences of node 6
There are 1 occurences of node 7
```

```
Dual variables are [14.0, 2.75, 9.0, -1.5, 12.0, -6.5, 11.75, 13.0, 11.0, -11.5,
-0.0]
th with load 17
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
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Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 16 Path is currently at node 4 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 19 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 17 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12

Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER C: Found path with load 17 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 14 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER C: Found path with load 12 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 15 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12

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Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
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Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
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Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
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PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
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PRICER_C: Found path with load 22
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 4 with load 6
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Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
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Path is currently at node 8 with load 5
Path is currently [ 0 8 7 9 6 5 9 6 11 0 0 0 0 0 0 0 0 0
0 0 0 0
 PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
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node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

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Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Labelling found path (0, 8, 7, 9, 6, 5, 9, 6, 11) with negative reduced cost
Added (0, 8, 7, 9, 6, 5, 9, 6, 11) with path weight 35Path is currently at node
7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
```

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Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 2 wi
There are 1 occurences of node 5
There are 2 occurences of node 6
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 2 occurences of node 9
Dual variables are [14.0, 2.75, 9.0, -1.5, 12.0, -6.5, 11.75, 13.0, 5.625,
-6.125, -0.0
th load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
```

```
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
```

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 20
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
```

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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
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Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
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Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
```

```
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 18
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 17
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
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Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
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Path is currently at node 6 with load 5
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Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is curre[ 0 1 7 8 6 11 0 0 0 0
                                               0 0 0 0 0 0 0 0 0 0
                                            0
0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] ntly at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
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Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
ERROR: Path length exceeds maximum. Current value of path_len is 33
PRICER_C: Capacity is 30
PRICER_C: Found path with load 18
Path is currently at node 2 with load 8
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 5 with load 5
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
```

PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 PRICER_C: Found path with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 13 Path is currently at node 8 with load 5 PRICER C: Found path with load 13 Path is currently at node 9 with load 5 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 13 Path is currently at node 2 with load 8 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 12 Path is currently at node 1 with load 10 PRICER_C: Found path with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 9 Path is currently at node 3 with load 7 PRICER_C: Found path with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 7 Path is currently at node 9 with load 5 PRICER_C: Found path with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 20

Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 PRICER C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 5 with load 5 PRICER C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER C:
Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently Labelling found path (0, 1, 7, 8, 6, 11) with negative reduced
Added (0, 1, 7, 8, 6, 11) with path weight 27
at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 1 wThere are 1 occurences of node 1
There are 1 occurences of node 6
There are 1 occurences of node 7
There are 1 occurences of node 8
Dual variables are [7.0, 1.0, 9.0, 2.0, 12.0, -3.0, 10.0, 13.0, 3.0, -0.0, -0.0]
ith load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 18
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
```

Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER C: Found path with load 17 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12

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Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 12
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 15
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
```

```
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Pat[ 0 5 7 8 3 11 0 0 0 0
                                  0
                                     0
                                        0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0
                               0
h is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
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Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2Labelling found path (0, 5, 7, 8, 3, 11)
with negative reduced cost
Added (0, 5, 7, 8, 3, 11) with path weight 32
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
```

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Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at nodThere are 1 occurences of node 3
There are 1 occurences of node 5
There are 1 occurences of node 7
There are 1 occurences of node 8
Dual variables are [4.0, 7.0, 9.0, 8.0, 3.0, 3.0, 7.0, 13.0, 3.0, -3.0, -0.0]
e 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
```

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Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
```

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Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
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Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
ERROR: Path length exceeds maximum. Current value of path_len is 33
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER C: Found path with load 18
Path is currently at node 1 with load 10
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
PRICER C: Found path with load 15
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 3 with load 7
PRICER_C: Found path with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 12
Path is currently at node 1 with load 10
PRICER_C: Found path with load 9
Path is currently at node 3 with load 7
PRICER_C: Found path with load 7
```

Path is currently at node 8 with load 5 PRICER_C: Found path with load 7 Path is currently at node 9 with load 5 PRICER_C: Found path with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 5 with load 5 PRICER C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5

PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 20 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2

PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 16 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5

PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER_C: Found path with load 17 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 15 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5

```
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
```

```
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is [ 0 8 7 8 7 9 4 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path iLabelling found path (0, 8, 7, 8, 7, 9, 4, 8, 7, 9, 11) with negative
reduced cost
Added (0, 8, 7, 8, 7, 9, 4, 8, 7, 9, 11) with path weight 46
s currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path iThere are 1 occurences of node 4
There are 3 occurences of node 7
There are 3 occurences of node 8
There are 2 occurences of node 9
Dual variables are [1.375, 1.125, 9.0, 1.5, 6.25, 8.875, 3.75, 13.0, -2.875,
12.0, -0.0]
s currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
ERROR: Path length exceeds maximum. Current value of path_len is 33
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 5 with load 5
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
```

Path is currently at node 5 with load 5 PRICER_C: Found path with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 12 Path is currently at node 1 with load 10 PRICER C: Found path with load 9 Path is currently at node 3 with load 7 PRICER C: Found path with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 7 Path is currently at node 9 with load 5 PRICER_C: Found path with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23

Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 5 with load 5 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18

Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 14 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20

Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 17 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 14 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 9

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
```

```
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is current[ 0 3 10 8 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
    0 0 0 0 0 0 0 0
                                        0 0 0]ly at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is
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currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 25 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 28 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10

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Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
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Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
ERROR: Path length exceeds maximum. Current value of path_len is 33
PRICER C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path witLabelling found path (0, 3, 10, 8, 7, 11) with negative
reduced cost
Added (0, 3, 10, 8, 7, 11) with path weight 24
There are 1 occurences of node 3
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 10
Dual variables are [11.0, 8.0, 9.0, -4.0, 9.0, 2.0, 1.0, 13.0, 4.0, 1.0, -0.0]
h load 12
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 3 with load 7
PRICER_C: Found path with load 10
Path is currently at node 8 with load 5
```

PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 9 Path is currently at node 3 with load 7 PRICER C: Found path with load 7 Path is currently at node 8 with load 5 PRICER C: Found path with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 17 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5

Path is currently at node 8 with load 5 PRICER_C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 3 with load 7

Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 14 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 18 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 16 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2

Path is currently at node 8 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5

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PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
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```
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
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```
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
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```
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
Path is currently at node 8 with loa[ 0 8 1 8 7 8 7 11 0 0 0 0 0
0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 8, 1, 8, 7, 8, 7, 11) with negative reduced cost
Added (0, 8, 1, 8, 7, 8, 7, 11) with path weight 33
d 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with There are 1 occurences of node 1
There are 2 occurences of node 7
There are 3 occurences of node 8
Dual variables are [-1.67999999999997, 8.04000000000001, 9.0,
5.560000000000005, 12.0, 2.119999999999, -2.16, 13.0, 3.96, 4.16, -0.0]
load 6
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
ERROR: Path length exceeds maximum. Current value of path_len is 33
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 13
Path is currently at node 8 with load 5
PRICER C: Found path with load 12
Path is currently at node 8 with load 5
PRICER_C: Found path with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 12
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5

PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 4 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 16 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER C: Found path with load 9 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2

```
PRICER_C: Found path with load 12
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
```

```
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is cu[ 0 5 4 5 4 10 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]rrently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 19
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 17
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 18
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with
Labelling found path (0, 5, 4, 5, 4, 10, 11) with negative reduced cost
Added (0, 5, 4, 5, 4, 10, 11) with path weight 15load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
ERROR: Path length exceeds maximum. Current value of path_len is 33
PRICER_C: Capacity is 30
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 10 with load 6
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 10 with load 6
PRICER_C: Found path with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 11
Path is currently at node 10 with load 6
PRICER_C: Found path with load 12
Path is currently at node 3 with load 7
PRICER_C: Found path with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 11
Path is currently at node 10 with load 6
PRICER_C: Found path with load 13
```

Path is currently at node 3 with load 7 PRICER_C: Found path with load 11 Path is currently at node 6 with load 5 PRICER_C: Found path with load 11 Path is currently at node 8 with load 5 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 16 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20

Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 Path is currently at no de 6 with load 5 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 16 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER C: Found path with load 16 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 21 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6

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Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at nodThere are 2 occurences of node 4e 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
```

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Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is c
There are 2 occurences of node 5
There are 1 occurences of node 10
Dual variables are [2.8888888888888893, 10.0, 9.0, 9.0, -2.888888888888875,
9.0, -4.4444444444445, 13.0, 5.6666666666666, 2.7777777777777786, -0.0]
urrently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
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Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 25 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 6 with load 5

Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5

Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6

```
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
ERROR: Path length exceeds maximum. Current value of path len is 33
PRICER_C: Capacity is 30
PRICER_C: Found path with load 18
Path is currently at node 2 with load 8
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 5 with load 5
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER C: Found path with load 14
Path is currently at node 10 with load 6
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 1 with load 10
PRICER_C: Found path with load 13
Path is currently at node 2 with load 8
PRICER_C: Found path with load 12
Path is currently at node 3 with load 7
PRICER_C: Found path with load 10
```

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
PRICER C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is [ 0 6 4 6 4 8 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
```

```
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently atLabelling found path (0, 6, 4, 6, 4, 8, 7, 11) with negative
reduced cost
Added (0, 6, 4, 6, 4, 8, 7, 11) with path weight 32
There are 2 occurences of node 4
There are 2 occurences of node 6
There are 1 occurences of node 7
There are 1 occurences of node 8
Dual variables are [5.770491803278691, 10.0, 9.0, 7.147540983606558,
-0.21311475409836134, 5.295081967213115, -5.885245901639346, 13.0,
8.754098360655739, 1.1311475409836067, -0.0]
node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
```

PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5

PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5

```
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
```

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PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 5 with loa[ 0 2 8 9 4 6 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]d 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
```

```
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path wit
Labelling found path (0, 2, 8, 9, 4, 6, 11) with negative reduced cost
Added (0, 2, 8, 9, 4, 6, 11) with path weight 26
There are 1 occurences of node 2
There are 1 occurences of node 4
There are 1 occurences of node 6
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [13.333333333333333, 1.0, 9.0, -2.0, 3.666666666666665, 3.0,
h load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

```
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
```

PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER C: Found path with load 12 Path is currently at node 8 with load 5 PRICER C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 11 Path is currently at node 5 with load 5 PRICER_C: Found path with load 13 Path is currently at node 2 with load 8 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 11 Path is currently at node 10 with load 6 PRICER_C: Found path with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6

PRICER_C: Found path with load 19 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 17 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 16 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 18 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7

PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 16 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8

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Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
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Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
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Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
```

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Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
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Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 14 Path is currently at node 4 with load 6 PRICER C: Found path with load 13 Path is currently at node 6 with load 5 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13

Path is currently at node 3 with load 7 PRICER_C: Found path with load 11 Path is currently at node 6 with load 5 PRICER_C: Found path with load 11 Path is currently at node 8 with load 5 PRICER C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 11 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5

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Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 18
Path is curr[ 0 8 10 8 10 8 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0
       0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 8, 10, 8, 10, 8, 7, 11) with negative reduced cost
```

```
Added (0, 8, 10, 8, 10, 8, 7, 11) with path weight 37
ently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 18
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: FoundThere are 1 occurences of node 7
There are 3 occurences of node 8
There are 2 occurences of node 10
Dual variables are [13.33333333333329, 8.83333333333332, 9.0,
-5.91666666666664, 11.5, -0.91666666666679, -9.666666666664, 13.0, 11.0,
3.8333333333332, -0.0]
path with load 17
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 16
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 19
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

PRICER_C: Found path with load 16 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
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```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

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Path is currently at node 6 with load 5
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
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Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
```

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Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
```

```
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 13
```

Path is currently at node 6 with load 5 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23

Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 2 with load 8 Path is currently at node 4 with load 6 PRICER C: Found path with load 19 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20

Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 8 with load 5 PRICER C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 19 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30

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Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRIC[ 0 9 5 9 5 9 5 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 9, 5, 9, 5, 9, 5, 11) with negative reduced cost
Added (0, 9, 5, 9, 5, 9, 5, 11) with path weight 34
There are 3 occurences of node 5
There are 3 occurences of node 9
Dual variables are [14.0, 10.0, 9.0, -0.44696969696937, 5.2878787878786,
-0.840909090909096, -7.36363636363636, 11.242424242424, 6.045454545454546,
5.318181818181813, -0.0]
ER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER C: Found path with load 15
Path is currently at node 9 with load 5
PRICER C: Found path with load 16
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 10 with load 6
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
```

PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER C: Found path with load 10 Path is currently at node 9 with load 5 PRICER C: Found path with load 11 Path is currently at node 10 with load 6 PRICER_C: Found path with load 11 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 11 Path is currently at node 10 with load 6 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 3 with load 7 PRICER_C: Found path with load 11 Path is currently at node 6 with load 5 PRICER_C: Found path with load 11 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21

```
Path is currently at n[ 0 2 5 1 8 7 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 2, 5, 1, 8, 7, 11) with negative reduced cost
Added (0, 2, 5, 1, 8, 7, 11) with path weight 19
There are 1 occurences of node 1
There are 1 occurences of node 2
There are 1 occurences of node 5
There are 1 occurences of node 7
There are 1 occurences of node 8
Dual variables are [12.6222222222224, 0.5555555555555589, 9.0,
3.9888888888889, 0.333333333333333, 1.055555555555556, -3.91111111111111,
9.4, 11.0, 6.3555555555556, -0.0]
ode 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
```

PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 21 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 24 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER C: Found path with load 21 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 16 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5

PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6

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Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
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Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 23 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5

Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 2 with load 8 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 4 with load 6 Path is currently at node 8 with load 5

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Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
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Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 27 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6

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Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with [ 0 3 10 1 9 7 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]load 22
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
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Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6

```
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found
Labelling found path (0, 3, 10, 1, 9, 7, 11) with negative reduced cost
Added (0, 3, 10, 1, 9, 7, 11) with path weight 26
path with load 30
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 18
Path is currently at node 2 with load 8
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found paThere are 1 occurences of node 1
There are 1 occurences of node 3
There are 1 occurences of node 7
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [7.636363636363633, 4.63636363636363, 9.0,
-1.34848484848486, 4.454545454545455, 7.2575757575761, -6.303030303030297,
8.5757575757574, 6.878787878787877, 8.787878787878787, -0.0]
th with load 15
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
```

PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 1 with load 10 PRICER C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 13 Path is currently at node 2 with load 8 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 11 Path is currently at node 10 with load 6 PRICER C: Found path with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23

Path is currently at node 6 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21

Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 5 with load 5 PRICER C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19

Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6

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Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
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Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
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Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
```

```
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 6, 10, 6, 9, 11) with negative reduced cost
Added (0, 6, 10, 6, 9, 11) with path weight 17
There are 2 occurences of node 6
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [9.750000000000002, 6.750000000000002, 9.0,
7.8472222222226, -4.333333333333337, 4.73611111111112, -0.277777777777777777,
7.11111111111111111, -0.444444444444444464, 7.972222222222221, -0.0]
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
```

```
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
```

```
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 18
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 5 with load 5
PRICER C: Found path with load 15
Path is currently at node 6 with load 5
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
```

PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER C: Found path with load 13 Path is currently at node 9 with load 5 PRICER C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 11 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 PRICER C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22

Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24

Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19

Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8[ 0 6 10 3 10 8 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at
Labelling found path (0, 6, 10, 3, 10, 8, 11) with negative reduced cost
Added (0, 6, 10, 3, 10, 8, 11) with path weight 18
There are 1 occurences of node 3
There are 1 occurences of node 6
There are 1 occurences of node 8
There are 2 occurences of node 10
Dual variables are [5.97142857142857, 2.9714285714285698, 9.0,
5.6333333333336, 1.9571428571428537, 4.43809523809524, 3.1761904761904773,
4.9238095238095205,\ 8.0333333333333333,\ -0.1809523809523803,\ -0.0]
node 3 with load 7
```

```
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
```

```
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
```

PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER C: Found path with load 16 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5

PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 9 with load 5 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 PRICER C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29

Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30

Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 25 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER C: Found path with load 25 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER C: Found path with load 22 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 27 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28

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Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
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Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25

```
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
```

```
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
```

Path is currently at node 9 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER C: Found path with load 10 Path is currently at node 9 with load 5 PRICER C: Found path with load 11 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13 Path is currently at node 3 with load 7 PRICER_C: Found path with load 11 Path is currently at node 6 with load 5 PRICER_C: Found path with load 11 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 20

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Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path [ 0 9 7 9 7 9 7 9 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 9, 7, 9, 7, 9, 7, 9, 7, 11) with negative reduced cost
Added (0, 9, 7, 9, 7, 9, 7, 11) with path weight 37
is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: FoThere are 4 occurences of node 7
There are 4 occurences of node 9
Dual variables are [7.2777777777777, 4.277777777777, 9.0,
8.300925925926, -1.0370370370370372, 3.4583333333335, 3.8842592592592613,
4.5972222222222, 5.365740740740739, 0.47222222222223, -0.0]
und path with load 23
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
```

Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER C: Found path with load 21 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 16 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30

Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30

Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28

Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26

Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 29 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 25 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28

Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25

Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6

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Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
ERROR: Path length exceeds maximum. Current value of path_len is 33
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 6 with load 5
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 6 with load 5
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER C: Found path with load 14
Path is currently at node 10 with load 6
PRICER C: Found path with load 13
Path is currently at node 10 with load 6
PRICER_C: Found path with load 12
Path is currently at node 10 with load 6
PRICER_C: Found path with load 11
Path is currently at node 10 with load 6
PRICER_C: Found path with load 13
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
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Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 2 with load 8 PRICER C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 24 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21

Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19

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Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 8 wi[ 0 2 7 9 7 9 7 9 11 0 0 0 0 0 0
0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 2, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost
Added (0, 2, 7, 9, 7, 9, 7, 9, 11) with path weight 21
th load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
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Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 4 with loaThere are 1 occurences of node 2
There are 3 occurences of node 7
There are 3 occurences of node 9
Dual variables are [10.428571428571429, 7.428571428571429, 9.0,
6.095238095238095, 0.3809523809523814, 1.095238095238095, -3.0476190476190457,
3.80952380952381, 7.571428571428569, 2.0476190476190474, -0.0]
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
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Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5

Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 5 with load 5

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Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load[ 0 9 1 9 1 11 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 9, 1, 9, 1, 11) with negative reduced cost
Added (0, 9, 1, 9, 1, 11) with path weight 25
There are 2 occurences of node 1
There are 2 occurences of node 9
Dual variables are [8.464285714285715, 8.214285714285714, 9.0,
7.797619047619048, -1.0595238095238098, 2.797619047619047, 0.22619047619047672,
3.1547619047619064, 4.035714285714286, 1.5238095238095233, -0.0]
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
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PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6

PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 26 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 5 with 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node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 29 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7

```
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
```

Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30

```
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 10 with load [ 0 2 5 4 6 4 11 0 0 0 0 0
  0 0 0 0 0 0 0 0 0
    Labelling found path (0, 2, 5, 4, 6, 4, 11) with negative reduced cost
Added (0, 2, 5, 4, 6, 4, 11) with path weight 18
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path isThere are 1 occurences of node 2
There are 2 occurences of node 4
There are 1 occurences of node 5
There are 1 occurences of node 6
Dual variables are [5.429313929313923, 0.6891891891891833, 9.0,
4.740124740124731, 3.8419958419958533, 3.9885654885654933, -0.30041580041580485,
9.339916839916844, 7.070686070686077, -2.1642411642411687, -0.0]
 currently at node 6 with load 5
Path is currently at node 4 with load 6
```

PRICER_C: Found path with load 19 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 14 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2

```
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
```

```
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node [ 0 8 1 8 7 8 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is current
Labelling found path (0, 8, 1, 8, 7, 8, 11) with negative reduced cost
Added (0, 8, 1, 8, 7, 8, 11) with path weight 25
There are 1 occurences of node 1
There are 1 occurences of node 7
There are 3 occurences of node 8
Dual variables are [5.809523809523811, 2.5, 9.0, 3.3095238095238084,
4.642857142857143, 4.238095238095242, -0.5238095238095231, 6.57142857142857,
6.690476190476189, -0.904761904761906, -0.0]
ly at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

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Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
[0 2 5 4 5 9 11 0 0 0 0 0
                                     0
                                        0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0
                                       0 0 0]Path is currently at node 7
with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path wi
Labelling found path (0, 2, 5, 4, 5, 9, 11) with negative reduced cost
Added (0, 2, 5, 4, 5, 9, 11) with path weight 11
th load 24
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_There are 1 occurences of node 2
There are 1 occurences of node 4
There are 2 occurences of node 5
There are 1 occurences of node 9
Dual variables are [9.643518518518519, 2.8611111111111107, 9.0,
6.7824074074074066, -0.75, 2.324074074076, 3.1898148148148158,
4.055555555555555, 2.856481481481481, 1.3101851851851842, -0.0]
C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
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Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 3 with load 7 PRICER C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 25

Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 24 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24

Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7

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Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
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Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path i[ 0 3 10 3 10 11 0 0 0
                                  0
                                     0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0
                               0
                                  0 0 0 0 0
s currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
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Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7Labelling found path (0, 3, 10, 3, 10, 11) with
negative reduced cost
Added (0, 3, 10, 3, 10, 11) with path weight 13
with load 2
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
```

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Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at nodeThere are 2 occurences of node 3
There are 2 occurences of node 10
Dual variables are [8.220338983050848, 5.300847457627118, 9.0,
2.9194915254237293, -0.75, 7.610169491525424, 0.9533898305084745,
5.275423728813559, 4.279661016949153, -2.5, -0.0]
9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
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Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
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PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
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Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
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Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load[ 0 6 4 6 4 6 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path
Labelling found path (0, 6, 4, 6, 4, 6, 11) with negative reduced cost
Added (0, 6, 4, 6, 4, 6, 11) with path weight 17
with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 9 with load 5
PRICER_C: Found path with load 14
Path is currently at node 10 with load 6
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
PRICER_C: Found path with load 13
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is cuThere are 2 occurences of node 4
There are 3 occurences of node 6
Dual variables are [8.360294117647058, 8.823529411764708, 9.0,
5.389705882352941, -3.676470588235297, 2.0735294117647056, -0.08088235294117752,
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5.5735294117647065, 4.139705882352942, -2.5, -0.0] rrently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23

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Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 wi[ 0 2 7 2 7 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
                                  0 0 0 0 0]th load 5
  0 0 0 0 0 0 0 0 0 0
PRICER C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 wit
h load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
```

```
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
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Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5

PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23

```
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Labelling found path (0, 2, 7, 2, 7, 11) with negative reduced cost
Added (0, 2, 7, 2, 7, 11) with path weight 15
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRIThere are 2 occurences of node 2
There are 2 occurences of node 7
Dual variables are [7.348837209302325, 8.476744186046512, 9.0,
1.4883720930232567, -2.0581395348837215, 4.674418604651161, -0.9767441860465116,
6.209302325581397, 5.151162790697675, -2.5, -0.0
CER C: Found path with load 22
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
```

PRICER_C: Found path with load 19 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5

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Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
```

```
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRI[ 0 2 7 2 5 11 0 0 0
                                              0
                                                 0 0 0 0 0
       0 0 0 0 0 0 0 0 0
                                     0
                                        0 0
Labelling found path (0, 2, 7, 2, 5, 11) with negative reduced cost
Added (0, 2, 7, 2, 5, 11) with path weight 12CER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
```

Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Pat h is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5

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Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 5 with loThere are 2 occurences of node 2
There are 1 occurences of node 5
There are 1 occurences of node 7
Dual variables are [8.4999999999998, 6.7499999999999, 9.0,
4.7499999999998, -2.25, 2.5000000000001, 0.75000000000018, 5.25,
4.000000000000002, -2.5, -0.0]
ad 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER C: Found path with load 15
Path is currently at node 9 with load 5
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
```

```
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with [ 0 2 7 2 7 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 2, 7, 2, 7, 11) with negative reduced cost
```

```
Path already in variables with reduced cost -0.0 with farkas False.
Dual variables are [9.540697674418603, 4.465116279069768, 9.0,
7.296511627906977, -1.8604651162790704, 0.8023255813953488, 2.552325581395349,
4.302325581395349, 2.9593023255813975, 1.9476744186046506, -0.0]load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node
8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
```

```
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
```

```
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
```

```
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with lo[ 0 2 3 10 3 7 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 2, 3, 10, 3, 7, 11) with negative reduced cost
ad 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at noAdded (0, 2, 3, 10, 3, 7, 11) with path weight 22
There are 1 occurences of node 2
There are 2 occurences of node 3
```

```
There are 1 occurences of node 7
There are 1 occurences of node 10
Dual variables are [9.613074204946997, 4.197879858657243, 5.708480565371026,
7.413427561837454, -1.74911660777385, 0.7243816254416968, 2.7137809187279163,
4.224381625441695, 2.886925795053003, 3.671378091872791, -0.0]
de 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
```

Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16

```
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]th is currently at node 8 with
load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
```

```
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 3
Labelling found path (0, 2, 10, 4, 6, 11) with negative reduced cost
Added (0, 2, 10, 4, 6, 11) with path weight 12
There are 1 occurences of node 2
There are 1 occurences of node 4
There are 1 occurences of node 6
There are 1 occurences of node 10
Dual variables are [9.595652173913045, 1.7021739130434774, 7.063043478260867,
5.963043478260867, 0.21521739130434892, 1.691304347826088, 3.5282608695652193,
3.958695652173911, 2.904347826086955, 2.6434782608695673, -0.0
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
```

```
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
```

Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] currently at node 8 with load
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
```

```
Path
Labelling found path (0, 3, 10, 3, 10, 11) with negative reduced cost
Path already in variables with reduced cost -6.413043478260867 with farkas
There are no paths with negative reduced costs
Dual variables are [9.410377358490567, 2.830188679245289, 9.0,
5.9103773584905674, -0.4150943396226445, 1.7264150943396217, 2.966981132075471,
4.2075471698113205, 3.0896226415094326, 1.533018867924529, -0.0]
is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
```

Path is currently at node 6 with load 5

```
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
```

Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10

```
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path wi[ 0 3 10 3 10 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 3, 10, 3, 10, 11) with negative reduced cost
Path already in variables with reduced cost -8.066037735849058 with farkas
False.
Dual variables are [9.757270693512304, 2.0973154362416113, 9.0,
6.775167785234899, -0.3076062639821018, 1.1498881431767334, 3.558165548098433,
3.894854586129754, 2.7427293064876963, 1.9776286353467563, -0.0]
th load 20
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
```

Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20

```
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 2 with loa[ 0 3 10 4 6 11 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0
                                        0 0 0]d8
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 18
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is
currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
```

```
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Labelling found path (0, 3, 10, 4, 6, 11) with negative reduced cost
Added (0, 3, 10, 4, 6, 11) with path weight 16
There are 1 occurences of node 3
There are 1 occurences of node 4
There are 1 occurences of node 6
There are 1 occurences of node 10
Dual variables are [8.38333333333336, 5.0, 9.0, 3.350000000000005,
-0.73333333333331, 3.433333333333333, 1.2166666666666615, 5.13333333333333,
4.11666666666664, 0.2166666666666666, -0.0]
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
[ 0 3 10 3 10 11 0 0 0 0 0 0
                                  0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 3, 10, 3, 10, 11) with negative reduced cost
Path already in variables with reduced cost -5.43333333333333 with farkas
False.
0.733333333333334, -0.0]PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 6 with load 5
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 9 with load 5
```

PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 9 with load 5

Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6

```
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
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Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER C: Found path with load 23 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER C: Found path with load 15 Path is currently at node 9 with load 5 PRICER C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8

Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node [ 0 9 1 9 7 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
           \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \ \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 
                                                                                           0 0 0]9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
```

```
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currentl
y at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
```

PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7

Path is currently at node 2 with load 8 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is curreLabelling found path (0, 9, 1, 9, 7, 11) with negative reduced cost
Added (0, 9, 1, 9, 7, 11) with path weight 25
There are 1 occurences of node 1
There are 1 occurences of node 7
There are 2 occurences of node 9
Dual variables are [12.8266666666666666, 5.0, 9.0, 2.92, -1.880000000000003,
3.719999999999999, -1.50666666666666677, 4.56000000000005, 6.84000000000001,
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
```

Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C : Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5

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Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
```

Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5

Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
R C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is cuLabelling found path (0, 9, 1, 9, 1, 11) with negative reduced cost
Path already in variables with reduced cost -14.33333333333333 with farkas
False.
Dual variables are [10.333333333333332, 10.0, 9.0, -7.3333333333333333,
-1.33333333333334, 3.4444444444444446, -7.3333333333333, 7.33333333333333,
11.0, -0.888888888888893, -0.0]
rrently at node 4 with load 6
PRICER C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 7 with load 2 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 25 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 15

Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7

Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5

```
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load [ 0 2 9 1 9 7 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
    PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with 1
Labelling found path (0, 2, 9, 1, 9, 7, 11) with negative reduced cost
Added (0, 2, 9, 1, 9, 7, 11) with path weight 27
There are 1 occurences of node 1
There are 1 occurences of node 2
There are 1 occurences of node 7
There are 2 occurences of node 9
```

```
Dual variables are [8.047619047619047, 10.0, 9.0, -12.238095238095235,
1.9047619047619033, 5.031746031746032, -9.904761904761903, 8.952380952380953,
9.428571428571429, -2.492063492063492, -0.0]
oad 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
PRICER C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 3 with load 7
Path[ 0 2 1 8 9 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 2, 1, 8, 9, 7, 11) with negative reduced cost
Added (0, 2, 1, 8, 9, 7, 11) with path weight 25
 is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
```

```
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
PaThere are 1 occurences of node 1
There are 1 occurences of node 2
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [7.66666666666667, 10.0, 9.0, -12.9999999999999999,
2.66666666666666, 5.666666666666667, -10.6666666666666, 9.333333333333333,
th is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
```

Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30

Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER C: Found path with load 15 Path is currently at node 8 with load 5 PRICER C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5

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Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
    2 8 1 8 7 11 0
                            0
                                   0
                                      0
                                           0
                                              0 0 0 0 0
    0 0 0 0 0 0 0 0
                               0
                                   0
                                     0
                                        0
                                           0 0]Path is currently at node 7
with load 2
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 wi
Labelling found path (0, 2, 8, 1, 8, 7, 11) with negative reduced cost
Added (0, 2, 8, 1, 8, 7, 11) with path weight 25
There are 1 occurences of node 1
There are 1 occurences of node 2
There are 1 occurences of node 7
There are 2 occurences of node 8
Dual variables are [8.333333333333334, 10.0, 9.0, -12.9999999999999999,
th load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
```

```
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
```

Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 26 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 30 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 26 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30

Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5

PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6

```
PRICER_C: Found path with load 20
Path is currently at node 8 wit[ 0 2 5 9 6 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]h load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path
Labelling found path (0, 2, 5, 9, 6, 11) with negative reduced cost
Added (0, 2, 5, 9, 6, 11) with path weight 13
There are 1 occurences of node 2
There are 1 occurences of node 5
There are 1 occurences of node 6
There are 1 occurences of node 9
with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
```

```
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
```

Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER C: Found path with load 15 Path is currently at node 8 with load 5 PRICER C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5

```
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Fo[ 0 2 3 10 3 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0
  0
                                           0 0]und path with load 23
                        0 0 0
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
```

```
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently
Labelling found path (0, 2, 3, 10, 3, 7, 11) with negative reduced cost
Path already in variables with reduced cost -1.3333333333333321 with farkas
False.
Dual variables are [7.000000000000036, 8.1666666666667, 9.0,
-10.66666666666668, 2.16666666666666, -6.50000000000002, -6.500000000000036,
8.16666666666666, 9.1666666666666, 3.1666666666666, -0.0]
at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
```

```
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
```

```
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is cu[ 0 2 1 8 9 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
       Labelling found path (0, 2, 1, 8, 9, 7, 11) with negative reduced cost
Path already in variables with reduced cost -1.0 with farkas False.
0.333333333333333, -8.33333333333334, -8.33333333333334, 10.0, 11.0,
1.33333333333334, -0.0]
rrently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
```

PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER C: Found path with load 15 Path is currently at node 9 with load 5 PRICER C: Found path with load 16 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5

Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 27

```
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER[ 0 2 3 2 9 7 11 0 0
                                  0
                                     0
                                        0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0
                                        0 0 0]_C: Found path with load 30
                                  0
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
```

```
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Labelling found path (0, 2, 3, 2, 9, 7, 11) with negative reduced cost
Added (0, 2, 3, 2, 9, 7, 11) with path weight 29
There are 2 occurences of node 2
There are 1 occurences of node 3
There are 1 occurences of node 7
There are 1 occurences of node 9
Dual variables are [5.777777777779, 10.0, 8.777777777779,
-10.7777777777779, 10.0, 11.0, 3.77777777777786, -0.0]
th is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
```

Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Capacity is 30 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15

Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 PRICER C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 2 with load 8 PRICER C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23

Path is currently at node 2 with load 8 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 9 with load 5 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 9 with load 5 PRICER C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20

```
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node[ 0 2 1 8 9 7 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
```

```
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at
Labelling found path (0, 2, 1, 8, 9, 7, 11) with negative reduced cost
Path already in variables with reduced cost -1.0 with farkas False.
6.555555555555, -0.33333333333333326, 1.4444444444444464, 3.1851851851851842,
4.77777777777777, 3.074074074074074, -0.0]
node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 18 Path is currently at node 2 with load 8 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 PRICER C: Found path with load 13 Path is currently at node 6 with load 5 PRICER C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 24

Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23

```
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at [ 0 5 9 1 8 11
                                           0 0 0 0 0 0 0 0 0 0 0
                                        0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0
                                        0 0 0]node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: F
Labelling found path (0, 5, 9, 1, 8, 11) with negative reduced cost
Added (0, 5, 9, 1, 8, 11) with path weight 19
There are 1 occurences of node 1
There are 1 occurences of node 5
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [14.0, 1.75, 9.0, -4.08333333333333, 2.583333333333333, 5.5,
5.75, 1.75, 0.66666666666666667, 0.875, -0.0] ound path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 28 Path is currently at node 5 with load 5 is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8

Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13

Path is currently at node 5 with load 5 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 8 with load 5 PRICER C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30

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Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
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Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load [ 0 1 7 1 7 10 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0
                                  0
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
```

```
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 9 w
Labelling found path (0, 1, 7, 1, 7, 10, 11) with negative reduced cost
Added (0, 1, 7, 1, 7, 10, 11) with path weight 25
ith load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 18
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 6 with load 5
PRICER C: Found path with load 15
Path is cuThere are 2 occurences of node 1
There are 2 occurences of node 7
There are 1 occurences of node 10
Dual variables are [13.75000000000004, 1.875, 9.0, -4.125000000000002, 2.625,
5.749999999999, 5.625, 1.87499999999982, 0.75, -13.75000000000007, -0.0]
rrently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
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Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 PRICER C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5

Path is currently at node 8 with load 5 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8

Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10

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PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
```

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PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path [ 0 1 7 1 7 9 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 9 with load 5
PRICER_C: Found path with load 14
```

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Path is currently at node 10 with load 6
PRICER_C: Found path with load 13
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Ρ
Labelling found path (0, 1, 7, 1, 7, 9, 11) with negative reduced cost
Added (0, 1, 7, 1, 7, 9, 11) with path weight 24
There are 2 occurences of node 1
There are 2 occurences of node 7
There are 1 occurences of node 9
Dual variables are [8.818181818182, 5.045454545454545, 9.0,
-0.04545454545455563, 0.86363636363633, 2.8181818181818077,
1.0454545454545396, 5.0454545454546, 4.27272727272805, 0.56818181818232,
-0.0]
RICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
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Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30

Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26

Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 9 with load 5
PRICER_C: Found path with load 14
Path is currently at node 10 with load 6
PRICER_C: Found path with load 13
Path is currently at node 10 with load 6
PRICER_C: Found path with load 13
Path is currently at node [ 0 3 10 3 10 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 3, 10, 3, 10, 11) with negative reduced cost
Path already in variables with reduced cost -6.1363636363647 with farkas
False.
load 7
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
```

```
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 9 with 1
There are no paths with negative reduced costs
Dual variables are [7.9375, 4.78125, 9.0, 3.0859375, -0.28125, 3.609375,
2.71875, 4.78125, 2.6875, 0.3046875, -0.0]
oad 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 9 with load 5
PRICER_C: Found path with load 14
Path is currently at node 10 with load 6
PRICER_C: Found path with load 10
Path is currently at node 9 with load 5
PRICER C: Found path with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at [ 0 2 7 2 7 2 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
```

```
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with
load 19
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
```

```
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node Labelling found path (0, 2, 7, 2, 7, 2, 11) with
negative reduced cost
Added (0, 2, 7, 2, 7, 2, 11) with path weight 18
There are 3 occurences of node 2
There are 2 occurences of node 7
Dual variables are [6.75, 3.0, 9.0, 2.9374999999999, 1.5, 3.708333333333334,
4.5, 4.58333333333333, 1.5, 0.3541666666666666, -0.0]
8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
```

```
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
```

```
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER C: Found path with load 13
Path is currently at node 5 with load 5
PRICER C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 9 with load 5
PRICER_C: Found path with load 14
Path is currently at node 10 with load 6
PRICER_C: Found path with load 13
Path is currently at node 10 with load 6
PRICER_C: Found path with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 10
Path is cu[ 0 2 7 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

```
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]rrently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently
Labelling found path (0, 2, 7, 8, 7, 9, 11) with negative reduced cost
Added (0, 2, 7, 8, 7, 9, 11) with path weight 17
There are 1 occurences of node 2
There are 2 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [7.214285714285714, 3.000000000000001, 9.0,
2.821428571428571, 1.499999999999991, 3.7857142857142856, 4.49999999999999,
4.428571428571429, 0.571428571428573, 0.3928571428571428, -0.0]
at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
```

Path is currently at node 9 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 9 with load 5 PRICER C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 19 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5

```
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
```

Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 1 with load 10

```
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 17
Path is currently at node 1 with lo[ 0 2 7 2 7 9 11 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 2, 7, 2, 7, 9, 11) with negative reduced cost
Added (0, 2, 7, 2, 7, 9, 11) with path weight 13
There are 2 occurences of node 2
There are 2 occurences of node 7
There are 1 occurences of node 9
Dual variables are [7.77999999999999, 3.0, 9.0, 2.6799999999998, 1.5,
3.880000000000012, 4.5, 4.2399999999999, -2.0, 0.440000000000006, -0.0]ad 10
PRICER_C: Found path with load 13
Path is currently at node 10 with load 6
PRICER_C: Found path with load 15
Path is currently at node 1 with load 10
PRICER_C: Found path with load 13
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
```

Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 PRICER C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23

Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 19 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21

Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10

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Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path[ 0 2 7 1 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] is currently at node 7 with
load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 1 with 1
Labelling found path (0, 2, 7, 1, 7, 9, 11) with negative reduced cost
Added (0, 2, 7, 1, 7, 9, 11) with path weight 17
oad 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path wThere are 1 occurences of node 1
There are 1 occurences of node 2
There are 2 occurences of node 7
There are 1 occurences of node 9
Dual variables are [7.78000000000001, 3.0, 9.0, 2.67999999999997, 1.5,
3.8800000000000003, 4.5, 4.2399999999999, -2.78000000000001,
0.440000000000001, -0.0
ith load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER C: Found path with load 15 Path is currently at node 1 with load 10 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7

PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 19 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 PRICER C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 18 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10

```
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 wit[ 0 2 7 1 7 2 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 2, 7, 1, 7, 2, 11) with negative reduced cost
Added (0, 2, 7, 1, 7, 2, 11) with path weight 22
There are 1 occurences of node 1
There are 2 occurences of node 2
There are 2 occurences of node 7
Dual variables are [7.0, 2.22000000000006, 9.0, 2.6799999999998,
2.2799999999994, 3.880000000000017, 5.279999999999, 4.239999999999,
-2.779999999999994, 0.440000000000013, -0.0]
h load 10
PRICER_C: Found path with load 20
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
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Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5

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PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node [ 0 2 7 8 1 9 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 2, 7, 8, 1, 9, 11) with negative reduced cost
Added (0, 2, 7, 8, 1, 9, 11) with path weight 15
There are 1 occurences of node 1
There are 1 occurences of node 2
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [6.04, 1.25999999999999, 9.0, 2.6800000000000015, 3.24,
10 with load 6
Path is currently at node 7 with load 2
```

Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER C: Found path with load 17 Path is currently at node 1 with load 10 PRICER C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25

Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 PRICER_C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22

Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 19 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is 0 2 7 8 7 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] currently at node 1 with load
10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with loa
Labelling found path (0, 2, 7, 8, 7, 8, 7, 9, 11) with negative reduced cost
```

```
Added (0, 2, 7, 8, 7, 8, 7, 9, 11) with path weight 25
There are 1 occurences of node 2
There are 3 occurences of node 7
There are 2 occurences of node 8
There are 1 occurences of node 9
2.6799999999955, 3.01333333333332, 3.8800000000007, 6.01333333333332,
4.24, -3.006666666666664, 0.44000000000000483, -0.0]
d 10
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
PRICER C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
```

Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20

Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5

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Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path wi[ 0 2 7 8 7 8 7 8 11 0 0 0 0 0 0 0 0
0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]th load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with
Labelling found path (0, 2, 7, 8, 7, 8, 7, 8, 11) with negative reduced cost
Added (0, 2, 7, 8, 7, 8, 7, 8, 11) with path weight 27
There are 1 occurences of node 2
There are 3 occurences of node 7
There are 3 occurences of node 8
Dual variables are [7.0, 2.365384615384615, 9.0, 1.8076923076923075,
2.134615384615385, 4.461538461538462, 5.134615384615385, 3.0769230769230766,
-2.634615384615385, 0.7307692307692307, -0.0]
load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
```

```
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
```

Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10

```
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at n[ 0 3 10 3 10 7 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] ode 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path w
Labelling found path (0, 3, 10, 3, 10, 7, 11) with negative reduced cost
Added (0, 3, 10, 3, 10, 7, 11) with path weight 22
ith load 18
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
```

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currentlyThere are 2 occurences of node 3
There are 1 occurences of node 7
There are 2 occurences of node 10
Dual variables are [6.875, 3.0, 6.5, 3.2500000000000027, 1.5,
3.499999999999982, 4.5, 3.5, -2.875, 2.2499999999999, -0.0
at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
```

```
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
```

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Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is curre[ 0 2 7 2 7 2 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 2, 7, 2, 7, 11) with negative reduced cost
Added (0, 2, 7, 2, 7, 11) with path weight 19
ntly at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at nodeThere are 3 occurences of node 2
There are 3 occurences of node 7
Dual variables are [8.066666666666668, 2.5999999999997, 7.66666666666682,
3.799999999994, 3.0000000000000, 3.133333333333364, 3.7333333333336,
4.3999999999999, -3.8, 1.39999999999915, -0.0]
8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
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Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30

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Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
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Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 25 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 22 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30

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Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with lo[ 0 2 5 4 5 4 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]ad 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Labelling found path (0, 2, 5, 4, 5, 4, 11) with negative reduced cost
Added (0, 2, 5, 4, 5, 4, 11) with path weight 16
There are 1 occurences of node 2
There are 2 occurences of node 4
There are 2 occurences of node 5
Dual variables are [8.088353413654618, 2.578313253012047, 7.787148594377509,
3.6987951807228905, 3.0120481927710863, 3.2008032128514063, 3.755020080321286,
4.385542168674698, -3.8072289156626486, 1.3132530120481931, -0.0]
ath is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
```

PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10

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Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
```

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Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load [ 0 2 5 1 8 7 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
```

```
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1
Labelling found path (0, 2, 5, 1, 8, 7, 11) with negative reduced cost
Path already in variables with reduced cost -2.8192771084337345 with farkas
Dual variables are [7.0, 2.8947368421052637, 6.894736842105262,
4.947368421052632, 1.6052631578947363, 2.3684210526315783, 4.605263157894736,
3.4298245614035086, -2.9298245614035086, 1.7894736842105274, -0.0
with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
```

Path is currently at node 7 with load 2 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER C: Found path with load 15 Path is currently at node 8 with load 5 PRICER C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22

Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5

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PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

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PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is curren[ 0 2 7 2 7 2 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]tly at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Labelling found path (0, 2, 7, 2, 7, 11) with negative reduced cost
Path already in variables with reduced cost -3.5 with farkas False.
Dual variables are [-1.333333333333334, -5.3333333333333, 8.83333333333332,
5.0, 5.66666666666666, 2.333333333333333, 17.0, -6.222222222222222,
-10.3333333333333334, -6.333333333333333, -0.0]
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
```

Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5

Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30

```
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
```

Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 22 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7

```
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
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PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10

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Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
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Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
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PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
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PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
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Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
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Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
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Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Capacity is 30 PRICER C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2

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Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
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Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
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PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
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PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
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PRICER_C: Found path with load 28
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PRICER_C: Found path with load 24
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
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PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
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Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
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Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
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Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
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Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is curren[ 0 7 4 7 4 7 4 7 11 0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]tly at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
```

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Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PR.
Labelling found path (0, 7, 4, 7, 4, 7, 4, 7, 11) with negative reduced cost
Added (0, 7, 4, 7, 4, 7, 11) with path weight 59
There are 3 occurences of node 4
There are 4 occurences of node 7
Dual variables are [-10.5, -5.333333333333333, -9.5, -3.0, 0.666666666666666661,
ICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
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Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28

Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24

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Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
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PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
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PRICER C: Found path with load 29
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PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
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PRICER_C: Found path with load 23
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PRICER_C: Found path with load 25
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PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28

Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29

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Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
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PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
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Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
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Path is currently at node 1 with load 10
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PRICER C: Found path with load 28
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Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
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PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
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PRICER_C: Found path with load 27
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Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 30 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23

Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5

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PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
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PRICER_C: Found path with load 30
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PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
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PRICER C: Found path with load 27
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PRICER_C: Found path with load 30
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PRICER_C: Found path with load 30
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PRICER_C: Found path with load 29
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PRICER C: Found path with load 29
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PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
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PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
```

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is curre[ 0 7 6 7 10 7 10 7 9 11 0 0 0 0 0 0 0 0 0 0 0
0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] ntly at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with loa
Labelling found path (0, 7, 6, 7, 10, 7, 10, 7, 9, 11) with negative reduced
cost
```

```
Added (0, 7, 6, 7, 10, 7, 10, 7, 9, 11) with path weight 47
There are 1 occurences of node 6
There are 4 occurences of node 7
There are 1 occurences of node 9
There are 2 occurences of node 10
Dual variables are [-1.333333333333334, -5.3333333333333, 8.83333333333332,
-3.0, 0.666666666666666, 7.66666666666666, 17.0, -6.22222222222222, -16.0,
-6.33333333333333, -0.0]
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 9
Path is currently at node 7 with load 2
PRICER C: Found path with load 9
Path is currently at node 3 with load 7
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 13
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 11
```

```
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 13
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
```

```
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
```

```
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 18
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 21
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 18
```

```
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 16
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 17
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER C: Found path with load 16
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
```

```
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
```

```
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at [ 0 7 3 7 6 7 5 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0
                                     0
                                        0 0 0] node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path
Labelling found path (0, 7, 3, 7, 6, 7, 5, 11) with negative reduced cost
Added (0, 7, 3, 7, 6, 7, 5, 11) with path weight 55
There are 1 occurences of node 3
There are 1 occurences of node 5
There are 1 occurences of node 6
There are 3 occurences of node 7
Dual variables are [-7.916666666666666, -5.33333333333333, -4.33333333333333,
-3.0, 0.666666666666661, 7.66666666666666, 17.0, -6.222222222222222,
-42.33333333333333, 6.83333333333333, -0.0]
is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER C: Capacity is 30
PRICER C: Found path with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 11
Path is currently at node 10 with load 6
PRICER_C: Found path with load 7
Path is currently at node 6 with load 5
PRICER_C: Found path with load 8
Path is currently at node 10 with load 6
PRICER_C: Found path with load 11
Path is currently at node 6 with load 5
```

PRICER_C: Found path with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER C: Found path with load 12 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 9 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 10 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 13 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER C: Found path with load 18 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2

Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Found path with load 14 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Found path with load 14 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Found path with load 15 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5

Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 4 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6

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Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
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Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 25 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 21 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21

```
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
```

```
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: F[ 0 7 6 7 10 7 10 7 8 11 0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
ound path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRILabelling found path (0, 7, 6, 7, 10, 7, 10, 7, 8, 11) with negative reduced
Added (0, 7, 6, 7, 10, 7, 10, 7, 8, 11) with path weight 49
There are 1 occurences of node 6
There are 4 occurences of node 7
There are 1 occurences of node 8
There are 2 occurences of node 10
Dual variables are [-1.3333333333333334, -5.33333333333333, 9.0, -3.0,
-12.66666666666666, 7.66666666666666, 17.0, -6.22222222222222,
-10.333333333333334, -10.2222222222221, -0.0]
CER_C: Found path with load 9
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
```

Path is currently at node 3 with load 7 PRICER_C: Found path with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 9 Path is currently at node 3 with load 7 PRICER C: Found path with load 7 Path is currently at node 6 with load 5 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 14 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER C: Found path with load 11 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Found path with load 19 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2

```
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 21
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 19
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 17
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 14
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER C: Found path with load 14
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 14
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 15
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
```

```
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
```

```
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
```

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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
```

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Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
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Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
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Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
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Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
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PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
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PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
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Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
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Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
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Path is currently at node 6 with load 5
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Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
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Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
ERROR: Path length exceeds maximum. Current value of path_len is 33
PRICER_C: Capacity is 30
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 11
Path is currently at node 10 with load 6
PRICER_C: Found path with load 7
Path is currently at node 6 with load 5
PRICER_C: Found path with load 8
Path is currently at node 10 with load 6
PRICER_C: Found path with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
```

Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 13 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER C: Found path with load 15 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 13 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 10 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18

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Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 10 with [ 0 7 3 7 6 7 6 7 11 3 7 6 7 9 11
0 0 0 0 0 0 0
                      0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at no
Labelling found path (0, 7, 3, 7, 6, 7, 6, 7, 11, 3, 7, 6, 7, 9, 11) with
negative reduced cost
Added (0, 7, 3, 7, 6, 7, 6, 7, 11, 3, 7, 6, 7, 9, 11) with path weight 92
There are 2 occurences of node 3
There are 3 occurences of node 6
There are 6 occurences of node 7
There are 1 occurences of node 9
There are 1 occurences of node 11
Dual variables are [-1.3333333333333334, -5.3333333333333, -11.33333333333333,
-3.0, 0.666666666666661, 7.6666666666666, 17.0, -6.222222222222222,
-10.3333333333333334, -10.2222222222221, -0.0]
```

de 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER C: Found path with load 18 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 17 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Found path with load 14 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Found path with load 14 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Found path with load 15 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5

Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 4 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25

```
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
```

Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6

```
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
```

```
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
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Path is currently at node 7 with load 2 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 29 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2

Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 6 with load 5 PRICER_C: Capacity is 30 PRICER C: Found path with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 9 Path is currently at node 3 with load 7 PRICER_C: Found path with load 7 Path is currently at node 6 with load 5 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 12 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 11 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7

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PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at [ 0 7 6 7 6 7 6 7 6 7 11 0 0 0 0 0 0 0 0
0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: F
Labelling found path (0, 7, 6, 7, 6, 7, 6, 7, 11) with negative reduced
cost
Added (0, 7, 6, 7, 6, 7, 6, 7, 11) with path weight 81
ound path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 21
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is curThere are 4 occurences of node 6
There are 5 occurences of node 7
Dual variables are [-1.55555555555555554, -5.3333333333333, 1.666666666666667,
-3.0, 3.33333333333333, -1.0, 17.0, -6.2222222222222, -10.3333333333333333,
-5.8888888888889, -0.0]
rently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 17
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 17
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 14
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 14
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 14
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
```

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Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
```

```
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
```

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Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
```

```
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
```

```
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
```

```
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
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PRICER C: Found path with load 25
Path is currently at node 8 with load 5
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PRICER_C: Found path with load 25
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PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
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Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
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Path is currently at node 2 with load 8
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PRICER C: Found path with load 25
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PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
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PRICER_C: Found path with load 23
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PRICER C: Found path with load 23
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PRICER_C: Found path with load 23
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PRICER C: Found path with load 24
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Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
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Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
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Path is currently at node 7 with load 2
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PRICER_C: Found path with load 24
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Path is currently at node 2 with load 8
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PRICER_C: Found path with load 23
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PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
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Path is currently at node 6 with load 5
PRICER C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 3 with load 7
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Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with lo
Labelling found path (0, 7, 2, 7, 2, 7, 10, 7, 11) with negative reduced cost
Added (0, 7, 2, 7, 2, 7, 10, 7, 11) with path weight 33
There are 2 occurences of node 2
There are 4 occurences of node 7
There are 1 occurences of node 10
-3.0, 3.33333333333333, -1.0, 17.0, -6.2222222222222, -10.3333333333333333,
-24.3333333333336, -0.0]
ad 5
Path is currently at node 7 with load 2
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PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
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Path is currently at node 6 with load 5
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Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
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PRICER_C: Found path with load 30
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PRICER_C: Found path with load 30
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PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
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PRICER_C: Found path with load 30
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Path is currently at node 7 with load 2
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PRICER C: Found path with load 30
Path is currently at node 7 with load 2
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Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
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Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
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Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
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Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
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PRICER C: Found path with load 27
Path is currently at node 7 with load 2
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PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
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Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 6 with load 5
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PRICER_C: Found path with load 23
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
ERROR: Path length exceeds maximum. Current value of path len is 33
PRICER_C: Capacity is 30
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 7
Path is currently at node 6 with load 5
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
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PRICER C: Found path with load 19
Path is currently at node 6 with load 5
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PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 1 with load 10
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Path is currently at node 6 with load 5
PRICER_C: Found path with load 17
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 14
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER C: Found path with load 14
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER C: Found path with load 14
Path is currently at node 8 with load 5
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PRICER_C: Found path with load 14
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PRICER_C: Found path with load 27
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PRICER C: Found path with load 25
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PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
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Path is currently at node 7 with load 2
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
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PRICER_C: Found path with load 22
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PRICER_C: Found path with load 23
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PRICER_C: Found path with load 29
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PRICER_C: Found path with load 27
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PRICER_C: Found path with load 24
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PRICER_C: Found path with load 24
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PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
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PRICER C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
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PRICER_C: Found path with load 25
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PRICER_C: Found path with load 22
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Path is currently at node 7 with load 2
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Path is currently at node 7 with load 2
PRICER C: Found path with load 22
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PRICER_C: Found path with load 22
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 7 with load 2
PRICER C: Found path with load 23
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 2 with load 8
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
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Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
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PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with [ 0 7 2 7 2 7 8 7 11 0 0 0 0 0
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Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currentl
Labelling found path (0, 7, 2, 7, 2, 7, 8, 7, 11) with negative reduced cost
Added (0, 7, 2, 7, 2, 7, 8, 7, 11) with path weight 33
There are 2 occurences of node 2
There are 4 occurences of node 7
There are 1 occurences of node 8
-3.0, 3.33333333333333, -1.0, 17.0, -24.3333333333336, -10.3333333333333334,
-24.3333333333336, -0.0]
y at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
```

```
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
```

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Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
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Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
```

```
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
```

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Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
```

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Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
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Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
```

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Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Found path wi[ 0 7 2 7 9 7 2 7 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]th load 30
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 9
Path is currently at node 3 with load 7
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 11
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 9
Path is
```

```
Labelling found path (0, 7, 2, 7, 9, 7, 2, 7, 11) with negative reduced cost
Added (0, 7, 2, 7, 9, 7, 2, 7, 11) with path weight 31
There are 2 occurences of node 2
There are 4 occurences of node 7
There are 1 occurences of node 9
Dual variables are [-1.333333333333334, -5.33333333333333, 9.0, -3.0, -4.0,
-1.0, 17.0, -24.3333333333333333, -26.33333333333336, -24.33333333333333336, -0.0]
currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
```

```
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

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Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
```

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Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
```

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Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at [ 0 7 3 7 3 7 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0
 Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
```

```
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Labelling found path (0, 7, 3, 7, 3, 7, 3, 7, 11) with negative reduced cost
Added (0, 7, 3, 7, 3, 7, 11) with path weight 59
There are 3 occurences of node 3
There are 4 occurences of node 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found p
Dual variables are [-1.333333333333334, -5.33333333333333, -3.0, -3.0,
-24.333333333333336, -0.0
ath with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
```

```
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

```
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently a[ 0 7 2 7 5 7 2 7 11 0 0 0 0 0 0 0 0 0
0 0 0 0
    0 0 0 0 0 0 0 0 0
                                        0 0 0]t node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Labelling found path (0, 7, 2, 7, 5, 7, 2, 7, 11) with negative reduced cost
Added (0, 7, 2, 7, 5, 7, 2, 7, 11) with path weight 45
There are 2 occurences of node 2
There are 1 occurences of node 5
There are 4 occurences of node 7
Dual variables are [-1.333333333333334, -5.33333333333333, -3.0, -3.0,
-12.33333333333334, -1.0, 17.0, -24.3333333333336, -26.3333333333333336,
-24.33333333333336, -0.0]
ath is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
```

```
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
```

```
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Capacity is 30
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 9
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 11
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 wi[ 0 7 2 7 2 7 6 11 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0
                                       0 0 0]th load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with
Labelling found path (0, 7, 2, 7, 2, 7, 6, 11) with negative reduced cost
Added (0, 7, 2, 7, 2, 7, 6, 11) with path weight 28
There are 2 occurences of node 2
There are 1 occurences of node 6
There are 3 occurences of node 7
Dual variables are [-1.333333333333334, -5.3333333333333, -3.0, -3.0,
-26.333333333333333, -24.333333333333336, -0.0]
load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with 1[ 0 7 2 7 2 7 6 11 0 0 0 0 0 0
0 0 0 0 0 0 0
       0 0 0 0 0 0 0 0 0 0 0 0 0]oad 10
PRICER_C: Found path with load 26
```

```
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found p
Labelling found path (0, 7, 2, 7, 2, 7, 6, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0]
ath with load 27
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
```

```
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is curThere are no paths with negative reduced costs
rently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with lThere are no paths with negative reduced costs
Dual variables are [10.5555555555555555, -0.8888888888888893, 9.0,
-11.4444444444445, 12.0, 2.5555555555556, 1.7777777777777786,
4.222222222221, -0.666666666666666, 0.33333333333333215, -0.0]
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
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Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with 1[ 0 5 1 5 2 7 11 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]oad 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently
Labelling found path (0, 5, 1, 5, 2, 7, 11) with negative reduced cost
Added (0, 5, 1, 5, 2, 7, 11) with path weight 23
There are 1 occurences of node 1
There are 1 occurences of node 2
There are 2 occurences of node 5
There are 1 occurences of node 7
Dual variables are [7.215384615384618, -3.276923076923074, 9.0,
3.3076923076923066, 4.015384615384616, 3.4615384617, 3.2923076923076917,
4.8307692307692305, 2.938461538461535, 0.35384615384615414, -0.0]
 at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
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Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Capacity is 30
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 9
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 12
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 11
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path[0 5 4 5 4 6 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 5, 4, 5, 4, 6, 11) with negative reduced cost
Added (0, 5, 4, 5, 4, 6, 11) with path weight 14
There are 2 occurences of node 4
There are 2 occurences of node 5
There are 1 occurences of node 6
Dual variables are [10.125, -2.125000000000006, 9.0, 5.87499999999999, 0.25,
1.75, -1.5000000000000036, 1.74999999999964, 6.75000000000007,
2.750000000000018, -0.0]
is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
```

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Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
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Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
```

```
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 wit[ 0 9 1 9 6 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]h load 10
```

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PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currentl
Labelling found path (0, 9, 1, 9, 6, 11) with negative reduced cost
Added (0, 9, 1, 9, 6, 11) with path weight 21
y at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
```

```
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with loadThere are 1 occurences of node 1
There are 1 occurences of node 6
There are 2 occurences of node 9
Dual variables are [10.125, 0.0624999999999911, 9.0, 5.875000000000001, 0.25,
1.74999999999999, -1.4999999999994, 1.750000000000044, 4.5625,
2.749999999999982, -0.0]
2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at nod[ 0 3 10 4 6 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 3, 10, 4, 6, 11) with negative reduced cost
Path already in variables with reduced cost -3.375 with farkas False.
Dual variables are [-9.66666666666668, 8.333333333333333, 9.0,
2.3333333333332, -5.33333333333332, -8.6666666666666, -7.66666666666666,
13.0, 11.0, 2.333333333333332, -0.0]e 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
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Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Capacity is 30
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 9
Path is currently at node 7 wi
th load 2
PRICER_C: Found path with load 9
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 12
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 11
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
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Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 21
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 19
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

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PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
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Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

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Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path i [ 0 9 8 9 8 9 8 11 0
                                  0
                                     0
                                           0 0 0 0 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0
                                  0
                                     0
                                       0 0 0]s currently at node 3 with load
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
```

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Path is currently at node 3 with load 7
Path is currently at node 7 w
Labelling found path (0, 9, 8, 9, 8, 9, 8, 11) with negative reduced cost
Added (0, 9, 8, 9, 8, 9, 8, 11) with path weight 52
There are 3 occurences of node 8
There are 3 occurences of node 9
Dual variables are [-5.88888888888887, 10.0, 9.0, 8.9999999999999,
-6.9444444444443, -11.5555555555555555, -6.4444444444445, 11.44444444444443,
ith load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
```

```
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Capacity is 30
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
```

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Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 14
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
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Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
```

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Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
                                       0 0 0 0 0 0 0 0 0 0 0 0
Path i[ 0 2 10 8 10 8 11 0 0
                                  0
                                     0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]s currently at node 1 with load
10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
```

```
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 w
Labelling found path (0, 2, 10, 8, 10, 8, 11) with negative reduced cost
Added (0, 2, 10, 8, 10, 8, 11) with path weight 20
There are 1 occurences of node 2
There are 2 occurences of node 8
There are 2 occurences of node 10
Dual variables are [-3.33333333333332, 7.4999999999999, 9.0,
6.333333333333333, 11.0, -0.0833333333333326, -0.0]
ith load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
```

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Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Capacity is 30
PRICER C: Found path with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
                                         0 0 0 0 0 0 0 0 0 0 0 0
Path is curren[ 0 2 5 9 8 11 0 0 0
0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

```
Labelling found path (0, 2, 5, 9, 8, 11) with negative reduced cost
Added (0, 2, 5, 9, 8, 11) with path weight 18
tly at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path iThere are 1 occurences of node 2
There are 1 occurences of node 5
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [-1.24999999999999, 7.499999999999, 9.0,
1.99999999999973, -4.7499999999998, -0.750000000000000, -6.5,
4.2499999999999, 11.0, 2.00000000000001, -0.0]
s currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Capacity is 30
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path [ 0 2 10 9 6 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] is currently at node 1 with
load 10
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
```

```
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 19
Path is currently at node 3 with load 7
Labelling found path (0, 2, 10, 9, 6, 11) with negative reduced cost
Added (0, 2, 10, 9, 6, 11) with path weight 18
There are 1 occurences of node 2
There are 1 occurences of node 6
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [-1.24999999999999, 7.499999999999, 9.0,
1.99999999999973, -4.74999999999998, -2.5, -6.5, 4.24999999999999, 11.0,
2.00000000000001, -0.0]
ath is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 1 with load 10
PRICER C: Found path with load 12
Path is currently at node 3 with load 7
PRICER C: Found path with load 10
Path is currently at node 6 with load 5
PRICER C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found p[ 0 2 10 3 10 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]ath with load 23
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5
Labelling found path (0, 2, 10, 3, 10, 11) with negative reduced cost
Added (0, 2, 10, 3, 10, 11) with path weight 9
```

```
There are 1 occurences of node 2
There are 1 occurences of node 3
There are 2 occurences of node 10
Dual variables are [-4.80952380952381, 5.285714285714288, 9.0,
6.904761904761905, -4.61904761904762, -3.5238095238095255, -2.80952380952381,
9.285714285714285, 8.047619047619047, -2.642857142857144, -0.0]
with load 5
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
```

```
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 w[ 0 2 9 4 9 4 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]ith load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6
Labelling found path (0, 2, 9, 4, 9, 4, 11) with negative reduced cost
Added (0, 2, 9, 4, 9, 4, 11) with path weight 33
There are 1 occurences of node 2
There are 2 occurences of node 4
There are 2 occurences of node 9
Dual variables are [-4.444444444445, 4.55555555555557, 9.0,
9.407407407407, 7.925925925925926, -2.277777777777786, -0.0]
with load 5
```

```
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
```

```
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
```

```
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER C: Found path with load[ 0 2 4 9 4 9 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0
                                       0 0 0] 24
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is curre
Labelling found path (0, 2, 4, 9, 4, 9, 11) with negative reduced cost
Added (0, 2, 4, 9, 4, 9, 11) with path weight 22
There are 1 occurences of node 2
There are 2 occurences of node 4
There are 2 occurences of node 9
Dual variables are [-4.16666666666667, 4.0, 9.0, 1.166666666666679,
-3.33333333333333, 3.5, -2.16666666666665, 9.5, 7.8333333333333, -2.0, -0.0]
ntly at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path [ 0 2 8 9 6 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

```
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] is currently at node 5 with
load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Pa
Labelling found path (0, 2, 8, 9, 6, 9, 11) with negative reduced cost
Added (0, 2, 8, 9, 6, 9, 11) with path weight 28
There are 1 occurences of node 2
There are 1 occurences of node 6
There are 1 occurences of node 8
There are 2 occurences of node 9
1.833333333333375, -2.33333333333355, 8.881784197001252e-15,
-1.6666666666666666, 9.66666666666666, 7.666666666666, -1.499999999999994,
th is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
```

```
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with[ 0 2 3 2 7 9 11 0 0 0 0 0 0 0
0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0
                                  0 0 0 0 0] load 7
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 13
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Labelling found path (0, 2, 3, 2, 7, 9, 11) with negative reduced cost
Added (0, 2, 3, 2, 7, 9, 11) with path weight 17
There are 2 occurences of node 2
There are 1 occurences of node 3
There are 1 occurences of node 7
There are 1 occurences of node 9
Dual variables are [-3.13333333333333, 0.600000000000001, 9.0,
3.03333333333333, -0.149999999999947, -0.066666666666599,
-0.866666666666663, 9.66666666666666, 7.666666666666, -0.30000000000000004,
-0.0]
is currently at node 5 with load 5
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is curr[ 0 3 10 3 8 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is curLabelling found path (0, 3, 10, 3, 8, 9, 11) with negative reduced
cost
Added (0, 3, 10, 3, 8, 9, 11) with path weight 30
rently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
```

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PaThere are 2 occurences of node 3
There are 1 occurences of node 8
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [-2.196428571428571, 1.8214285714285712, 6.964285714285714,
3.1071428571428577, -0.45535714285714324, 1.8392857142857126,
-0.5892857142857153, 8.982142857142858, 6.982142857142858, 0.1071428571428572,
th is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 wi[ 0 3 10 8 7 8 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 3, 10, 8, 7, 8, 11) with negative reduced cost
Added (0, 3, 10, 8, 7, 8, 11) with path weight 24
th load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
```

```
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found pThere are 1 occurences of node 3
There are 1 occurences of node 7
There are 2 occurences of node 8
There are 1 occurences of node 10
Dual variables are [-2.1860465116279055, 1.8837209302325562, 6.8604651162790695,
2.837209302325583, -0.47093023255813904, 1.9534883720930214,
-0.8488372093023244, 8.930232558139535, 7.220930232558139, 0.12790697674418716,
-0.07
ath with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
```

```
PRICER_C: Found path with load 17
Path is currently at node[ 0 3 10 8 7 8 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 3, 10, 8, 7, 8, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
with load 7
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
PRICER_C: Found path with load 13
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
There are no paths with negative reduced costs
Dual variables are [-4.6206896551724155, 5.172413793103449, 7.3448275862068995,
0.5172413793103434, -4.241379310344831, -2.1379310344827633,
-2.6206896551724155, 9.17241379310345, 7.896551724137932, -1.7586206896551744,
-0.07
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
```

Path is currently at node 1 with load 10

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path i[ 0 2 3 2 7 9 11 0 0
                                  0 0 0
                                          0 0 0 0 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]s currently at node 1 with load
10
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is cu
Labelling found path (0, 2, 3, 2, 7, 9, 11) with negative reduced cost
```

False. Dual variables are [8.33333333333333334, -0.83333333333333, 9.0, -0.5, 4.5, 6.0, 2.0, 2.166666666666667, 3.333333333333333, 0.416666666666666, -0.0] rrently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30

Path already in variables with reduced cost -5.965517241379317 with farkas

```
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 3[ 0 3 10 3 10 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 3, 10, 3, 10, 11) with negative reduced cost
Path already in variables with reduced cost -5.83333333333333 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]0
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10
There are no paths with negative reduced costs
Dual variables are [10.064220183486238, -1.1926605504587156, 9.0,
2.706422018348623, 4.495412844036697, 3.8623853211009176, 1.6880733944954134,
3.944954128440367, 0.4954128440366965, 0.5963302752293578, -0.0
with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
```

Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13

Path is currently at node 9 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 8 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]rently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
```

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path
Labelling found path (0, 5, 1, 3, 10, 11) with negative reduced cost
Added (0, 5, 1, 3, 10, 11) with path weight 17
There are 1 occurences of node 1
There are 1 occurences of node 3
There are 1 occurences of node 5 is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with
There are 1 occurences of node 10
Dual variables are [5.054794520547945, -4.006849315068491, 9.0,
```

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4.780821917808218, 2.493150684931509, 2.4794520547945207, 3.0958904109589085,
5.616438356164382, 5.239726027397255, 0.45205479452054576, -0.0]
load 5
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is [ 0 5 4 5 4 6 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER C: Found path with load 14
Path is currently at node 4 with load 6
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 9 with load 5
PRICER_C: Found path with load 14
Path is currently at node 10 with load 6
PRICER_C: Found path with load 13
Path is currently at node 10 with load 6
PRICER_C: Found path with load 13
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 3 with lo
Labelling found path (0, 5, 4, 5, 4, 6, 11) with negative reduced cost
Path already in variables with reduced cost -3.0273972602739754 with farkas
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0, 0.0]
ad 7
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 22
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is There are no paths with negative reduced costscurrently at node 4 with
load 6
PRICER C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently
Dual variables are [6.0, -1.0, 9.0, 4.0, 3.0, 8.0, 5.0, 3.0, 2.0, -1.0, -0.0]
at node 4 with load 6
Path is currently at node 10 with load 6
```

PRICER_C: Found path with load 19 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 19 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6

Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 25 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 24 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6

```
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 9 with load 5
PRICER_C: Found path with load 14
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path wit[ 0 6 4 6 9 7 8 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0
                                       0 0 0]h load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
```

```
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 wit
Labelling found path (0, 6, 4, 6, 9, 7, 8, 11) with negative reduced cost
Added (0, 6, 4, 6, 9, 7, 8, 11) with path weight 25
There are 1 occurences of node 4
There are 2 occurences of node 6
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [5.904761904761905, -0.0952380952380949, 9.0,
5.428571428571429, 2.047619047619048, 5.190476190476191, 3.904761904761905,
3.7142857142857144, 1.5714285714285703, 0.04761904761904745, -0.0]
h load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5

Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 19 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 9 with load 5 PRICER_C: Found path with load 22 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 19 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8

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Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
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Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 PRICER C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 PRICER C: Found path with load 14 Path is currently at node 10 with load 6 PRICER C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20

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Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 10 with[ 0 6 4 6 4 6 7 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 6, 4, 6, 4, 6, 7, 11) with negative reduced cost
Added (0, 6, 4, 6, 4, 6, 7, 11) with path weight 30
There are 2 occurences of node 4
There are 3 occurences of node 6
There are 1 occurences of node 7
Dual variables are [5.9642857142857135, -0.2857142857142857, 9.0,
5.535714285714286, 1.892857142857143, 5.071428571428572, 3.7142857142857144,
3.642857142857143, 1.9642857142857144, 0.14285714285714285, -0.0]
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
```

Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 27 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER C: Found path with load 13 Path is currently at node 9 with load 5 PRICER C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7

PRICER_C: Found path with load 19 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5

```
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
```

```
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER C: Capacity is 30
PRICER_C: [ 0 6 4 6 4 6 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0
                                        0 0 0] Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 9 w
ith load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
```

```
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 witLabelling found path (0, 6, 4, 6, 4, 6, 7, 11)
with negative reduced costh load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is cur
rently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
```

```
Path is currently at node 9 with load 5
PathPath already in variables with reduced cost -0.0 with farkas False.
Dual variables are [1.0, 6.0, 4.0, 7.0, -7.0, 5.0, -0.0, 7.0, 1.0, -6.0, -0.0]
is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at[0 6 4 6 4 9 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 6, 4, 6, 4, 9, 11) with negative reduced cost
Added (0, 6, 4, 6, 4, 9, 11) with path weight 19
There are 2 occurences of node 4
There are 2 occurences of node 6
There are 1 occurences of node 9
Dual variables are [-2.7058823529411757, 5.294117647058823, 2.617647058823529,
3.1764705882352935, -1.323529411764706, 3.7352941176470593, -1.382352941176471,
8.617647058823529, 5.176470588235295, -1.2647058823529402, -0.0]
[0 2 5 4 6 9 11 0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently a
Labelling found path (0, 2, 5, 4, 6, 9, 11) with negative reduced cost
Added (0, 2, 5, 4, 6, 9, 11) with path weight 12
There are 1 occurences of node 2
There are 1 occurences of node 4
There are 1 occurences of node 5
t node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: There are 1 occurences of node 6
There are 1 occurences of node 9
Dual variables are [-2.7058823529411757, 5.294117647058823, 2.617647058823529,
3.1764705882352935, -5.382352941176471, 3.7352941176470593, -1.382352941176471,
8.617647058823529, 5.176470588235295, -1.2647058823529402, -0.0]
Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 [ 0 2 7 9 4 6 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 2, 7, 9, 4, 6, 11) with negative reduced cost
Added (0, 2, 7, 9, 4, 6, 11) with path weight 15with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
```

```
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at nod
There are 1 occurences of node 2
There are 1 occurences of node 4
There are 1 occurences of node 6
There are 1 occurences of node 7
There are 1 occurences of node 9
Dual variables are [-2.4117647058823524, 4.588235294117648, 4.235294117647058,
3.352941176470589, -4.764705882352941, 3.4705882352941173, -1.7647058823529402,
9.235294117647058, 5.352941176470587, -1.5294117647058822, -0.0]
e 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
```

```
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with loa[ 0 6 4 6 4 6 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 6, 4, 6, 4, 6, 11) with negative reduced cost
Path already in variables with reduced cost -0.117647058823529 with farkas
False.
Dual variables are [-2.7058823529411766, 5.294117647058824, 2.617647058823528,
3.1764705882352944, -5.382352941176471, 3.735294117647059, -1.3823529411764701,
8.617647058823529, 5.1764705882352935, -1.2647058823529411, -0.0]
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
d 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with Labelling found path (0, 2, 7, 9, 4, 6, 11) with
negative reduced cost
Path already in variables with reduced cost -1.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0, 0.0]
There are no paths with negative reduced costs
Dual variables are [1.0, 6.0, 4.0, 7.0, -7.0, 5.0, -0.0, 7.0, 1.0, -6.0, -0.0]
load 25
Path is currently at node 8 with load 5
```

Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER C: Found path with load 15 Path is currently at node 3 with load 7 PRICER C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2

```
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is current[ 0 6 4 6 4 9 11
0 0 0
                                        0 0 0]ly at node 3 with load 7
  0 0 0 0 0 0 0 0 0 0
                                  0
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is current
Labelling found path (0, 6, 4, 6, 4, 9, 11) with negative reduced cost
Path already in variables with reduced cost -6.0 with farkas False.
Dual variables are [4.0, 10.0, 9.0, -9.5, 12.0, 9.0, -20.0, 13.0, -18.0, -8.0,
-0.0]
ly at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Capacity is 30
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 6 with load 5
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
```

Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7

```
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
```

Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2

```
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is current[ 0 5 2 5 6 10 11 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]ly at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is curr
Labelling found path (0, 5, 2, 5, 6, 10, 11) with negative reduced cost
Added (0, 5, 2, 5, 6, 10, 11) with path weight 17
There are 1 occurences of node 2
There are 2 occurences of node 5
There are 1 occurences of node 6
There are 1 occurences of node 10
Dual variables are [1.5, 10.0, 9.0, -5.0, 7.5, 9.0, -15.5, 13.0, -13.5, -17.0,
ently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
```

Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30

```
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at [ 0 2 5 6 5 9 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 6 with load 5
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 12
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
```

Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5

```
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5Labelling found path (0, 2, 5, 6, 5, 9,
11) with negative reduced cost
Added (0, 2, 5, 6, 5, 9, 11) with path weight 17
There are 1 occurences of node 2
There are 2 occurences of node 5
There are 1 occurences of node 6
There are 1 occurences of node 9
Dual variables are [1.5, 10.0, 9.0, -5.0, 7.5, 9.0, -15.5, 13.0, -17.0, -17.0,
-0.0]
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
```

Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26

```
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Fou[ 0 2 5 6 5 6 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
                                       0 0 0]nd path with load 21
    0 0 0 0 0 0 0 0 0 0 0
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is
Labelling found path (0, 2, 5, 6, 5, 6, 11) with negative reduced cost
Added (0, 2, 5, 6, 5, 6, 11) with path weight 17
There are 1 occurences of node 2
There are 2 occurences of node 5
There are 2 occurences of node 6
Dual variables are [-6.333333333333334, 10.0, 9.0, 2.25000000000001,
-0.666666666666661, 4.16666666666666, -7.66666666666666, 13.0,
-4.33333333333334, -8.0, -0.0]
```

```
currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently [ 0 2 3 2 8 7 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 2, 3, 2, 8, 7, 11) with negative reduced cost
Added (0, 2, 3, 2, 8, 7, 11) with path weight 29
There are 2 occurences of node 2
There are 1 occurences of node 3
There are 1 occurences of node 7
There are 1 occurences of node 8
Dual variables are [-1.0, 10.0, 9.0, 2.2500000000001, -0.666666666666661,
4.1666666666666666666, -13.0, 13.0, -4.333333333333334, -8.0, -0.0]
at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
```

PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5

```
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6[ 0 2 5 4 6 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5
Labelling found path (0, 2, 5, 4, 6, 11) with negative reduced cost
Added (0, 2, 5, 4, 6, 11) with path weight 8
There are 1 occurences of node 2
There are 1 occurences of node 4
There are 1 occurences of node 5
There are 1 occurences of node 6
Dual variables are [-1.0, 10.0, 9.0, -5.0, -6.0, 9.0, -13.0, 13.0, -2.0, -8.0,
-0.0]
with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
                                        3 8 6 9 11 0 0 0 0 0 0 0
Path is currently at node 6 with [ 0
                                     2
0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0
                                       0 0 0]load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with
Labelling found path (0, 2, 3, 8, 6, 9, 11) with negative reduced cost
Added (0, 2, 3, 8, 6, 9, 11) with path weight 32
There are 1 occurences of node 2
There are 1 occurences of node 3
There are 1 occurences of node 6
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [-6.66666666666667, 10.0, 2.0, -5.0, -6.0, 9.0,
load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path[ 0 2 8 2 8 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

```
Labelling found path (0, 2, 8, 2, 8, 7, 11) with negative reduced cost
Added (0, 2, 8, 2, 8, 7, 11) with path weight 37
There are 2 occurences of node 2
There are 1 occurences of node 7
There are 2 occurences of node 8
Dual variables are [-7.0, 9.0, 2.5, -5.0, -5.0, 9.0, -7.0, 13.0, -1.5, -7.5,
is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently a[ 0 2 8 6 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]t node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
```

```
Path is currently at node 7 with load 2
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 4
Labelling found path (0, 2, 8, 6, 9, 11) with negative reduced cost
Added (0, 2, 8, 6, 9, 11) with path weight 26
with load 6
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with loadThere are 1 occurences of node 2
There are 1 occurences of node 6
There are 1 occurences of node 8
```

```
There are 1 occurences of node 9
Dual variables are [-7.2, 8.4, 6.0, -4.7000000000001, -4.5000000000001, 8.8,
-6.8, 13.0, -4.20000000000001, -7.2, -0.0]
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
```

```
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at n[ 0 2 8 6 8 11 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 2, 8, 6, 8, 11) with negative reduced cost
Added (0, 2, 8, 6, 8, 11) with path weight 33
There are 1 occurences of node 2
There are 1 occurences of node 6
There are 2 occurences of node 8
Dual variables are [-9.75, 0.75, 9.0, -0.875, 1.875, 6.25, -4.25, 13.0, 2.375,
-6.75, -0.0
ode 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Capacity is 30
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
```

Path is currently at node 5 with load 5 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Capacity is 30

```
PRICE[ 0 2 5 6 4 6 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 2, 5, 6, 4, 6, 11) with negative reduced cost
Added (0, 2, 5, 6, 4, 6, 11) with path weight 13
There are 1 occurences of node 2
There are 1 occurences of node 4
There are 1 occurences of node 5
There are 2 occurences of node 6
Dual variables are [-9.33333333333332, 2.0, 9.0, 1.0, -0.0, 5.0,
-4.66666666666667, 13.0, 3.0, -6.33333333333333, -0.0]
R_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently [ 0 2 3 8 9 6 11 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 2, 3, 8, 9, 6, 11) with negative reduced cost
Added (0, 2, 3, 8, 9, 6, 11) with path weight 30
at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path iThere are 1 occurences of node 2
There are 1 occurences of node 3
There are 1 occurences of node 6
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [-10.0, -0.0, 9.0, 1.0, 2.0, 5.0, -4.0, 13.0, 3.0, -7.0,
-0.0]
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 2, 3, 8, 7, 8, 11) with negative reduced cost
Added (0, 2, 3, 8, 7, 8, 11) with path weight 27
There are 1 occurences of node 2
There are 1 occurences of node 3
There are 1 occurences of node 7
There are 2 occurences of node 8
Dual variables are [-10.5, -1.5, 6.0, 1.0, 3.5, 5.0, -3.5, 13.0, 3.0, -4.5,
-0.0]
s currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
```

```
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 [ 0 8 7 8 7 8 7 8 11 0 0 0 0 0 0 0
0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 8, 7, 8, 7, 8, 7, 8, 11) with negative reduced costwith
load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at
Added (0, 8, 7, 8, 7, 8, 7, 8, 11) with path weight 37
There are 3 occurences of node 7
There are 4 occurences of node 8
```

```
Dual variables are [-9.0, -1.5, 7.5, 1.0, 3.5, 5.0, -5.0, 13.0, 3.0, -4.5, -0.0]
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 6, 4, 5, 4, 8, 11) with negative reduced cost
Added (0, 6, 4, 5, 4, 8, 11) with path weight 22
node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at nodeThere are 2 occurences of node 4
There are 1 occurences of node 5
There are 1 occurences of node 6
There are 1 occurences of node 8
Dual variables are [-9.0, -0.0, 6.0, 1.0, 2.0, 5.0, -5.0, 13.0, 3.0, -3.0, -0.0]
3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 wit[ 0 8 10 8 10 8 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 8, 10, 8, 10, 8, 11) with negative reduced cost
Added (0, 8, 10, 8, 10, 8, 11) with path weight 29
There are 3 occurences of node 8
There are 2 occurences of node 10
Dual variables are [-9.0, -0.0, 6.0, 1.0, 2.0, 5.0, -5.0, 13.0, 3.0, -5.0, -0.0]
0 0 0 0 0 0 0 0 0 0
                                 0 0 0 0 0]h load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path
Labelling found path (0, 2, 5, 4, 6, 8, 11) with negative reduced cost
Added (0, 2, 5, 4, 6, 8, 11) with path weight 19
There are 1 occurences of node 2
There are 1 occurences of node 4
There are 1 occurences of node 5
There are 1 occurences of node 6
There are 1 occurences of node 8
Dual variables are [-9.0, -3.66666666666666666, 8.0, -0.6666666666666679,
4.22222222223, 6.11111111111111, -5.0, 13.0, 4.3333333333333, -5.0, -0.0]
with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
```

```
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
```

```
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
PRICER C: Found path with load 18
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 13
Path is currently at node 6 with load 5
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 13
Path is currently at node 2 with load 8
PRICER_C: Found path with load 12
Path is currently at node 3 with load 7
PRICER C: Found path with load 10
Path is currently at node 6 with load 5
PRICER C: Found path with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 1[ 0 6 9 6 9 6 9 11 0 0 0 0
0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0
                                  0 0 0 0 0]0
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is
Labelling found path (0, 6, 9, 6, 9, 6, 9, 11) with negative reduced cost
Added (0, 6, 9, 6, 9, 6, 9, 11) with path weight 29
currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 20
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 18
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently There are 3 occurences of node 6
There are 3 occurences of node 9
Dual variables are [-9.0, -3.666666666666643, 8.0, -0.666666666666666661,
4.66666666666666, 5.66666666666666, -5.0, 13.0, 4.0, -5.0, -0.0]
at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
```

```
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
```

```
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 25
Path is c[ 0 6 5 6 5 6 9 11
                                    0 0 0 0 0 0 0 0 0 0 0 0 0
                                  0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 6, 5, 6, 5, 6, 9, 11) with negative reduced cost
Added (0, 6, 5, 6, 5, 6, 9, 11) with path weight 29
There are 2 occurences of node 5
There are 3 occurences of node 6
There are 1 occurences of node 9
Dual variables are [-9.0, -3.333333333333334, 8.0, -0.333333333333333333,
4.16666666666666, 5.5, -5.0, 13.0, 4.1666666666666, -5.0, -0.0]
urrently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
```

```
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
```

```
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with 1[ 0 8 9 6 5 6 9 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0
  oad 28
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 13
Path is currently at node 6 with load 5
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER C: Found path with load 12
Path is currently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 2 with load 8
PRICER_C: Found path with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path Labelling found path (0, 8, 9, 6, 5, 6, 9, 11) with
negative reduced cost
Added (0, 8, 9, 6, 5, 6, 9, 11) with path weight 36
There are 1 occurences of node 5
There are 2 occurences of node 6
There are 1 occurences of node 8
There are 2 occurences of node 9
```

```
Dual variables are [-7.88888888888889, -2.999999999999, 7.4444444444444446,
1.3322676295501878e-15, 4.3333333333333, 5.33333333333333,
with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 12
Path is currently at node 3 with load 7
PRICER_C: Found path with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
```

```
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 18
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is cu[0 6 9 6 9 6 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0
                                        0 0 0]rrently at node 6 with load 5
    0 0 0 0 0 0 0 0 0 0 0
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
```

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Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Labelling found path (0, 6, 9, 6, 9, 6, 9, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
Dual variables are [-9.0, 1.33333333333334, 4.6666666666666666, 6.0,
-4.33333333333334, 1.333333333333334, -5.0, 13.0, 4.33333333333333, -5.0,
-0.07
R C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path [ 0 8 4 6 4 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] is currently at node 6 with
```

```
load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Labelling found path (0, 8, 4, 6, 4, 9, 11) with negative reduced cost
Added (0, 8, 4, 6, 4, 9, 11) with path weight 28
There are 2 occurences of node 4
There are 1 occurences of node 6
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [-8.962962962962962, 3.1111111111111125, 2.9259259259259247,
5.11111111111111, -2.6666666666666666, 0.444444444444464, -5.037037037037,
13.0, 4.3333333333333, -5.0, -0.0]
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
```

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 13
Path is currently at node 6 with load 5
PRICER C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
PRICER_C: Found path with load 13
Path is currently at node 2 with load 8
PRICER_C: Found path with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 10
Path is currently at node 8 with lo[ 0 2 8 9 8 9 11 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 2, 8, 9, 8, 9, 11) with negative reduced cost
Added (0, 2, 8, 9, 8, 9, 11) with path weight 36
ad 5
PRICER_C: Found path with load 12
Path is currently at node 3 with load 7
PRICER_C: Found path with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is curThere are 1 occurences of node 2
There are 2 occurences of node 8
```

```
There are 2 occurences of node 9
Dual variables are [-9.0, 1.33333333333334, 4.6666666666666666, 6.0,
-1.666666666666679, -1.333333333333321, -5.0, 13.0, 4.333333333333333, -5.0,
rently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER C: Found path with load 18
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
```

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently [ 0 8 4 8 4 9 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
  0 0 0 0 0 0 0 0 0 0
                                 0 0 0 0] at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently a
Labelling found path (0, 8, 4, 8, 4, 9, 11) with negative reduced cost
Added (0, 8, 4, 8, 4, 9, 11) with path weight 40
There are 2 occurences of node 4
There are 2 occurences of node 8
There are 1 occurences of node 9
4.8333333333334, -1.666666666666679, 1.0, -5.0, 13.0, 4.333333333333333333,
-5.0, -0.0]
t node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is curre[ 0 8 4 6 4 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 8, 4, 6, 4, 9, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
Dual variables are [7.0399999999999, -3.5600000000000023, 9.0,
3.759999999997, 3.73000000000002, 4.0700000000003, 3.29000000000036,
4.89, 3.340000000000007, 0.01999999999998685, -0.0]
ntly at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
```

Path is currently at node 5 with load 5 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 22 Path is currently at node 2 with load 8 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5

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PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
```

```
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path i[ 0 5 4 5 4 6 11 0 0
                                                                               \  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  \, 0\  
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]s currently at node 5 with load
PRICER C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is
Labelling found path (0, 5, 4, 5, 4, 6, 11) with negative reduced cost
```

Path already in variables with reduced cost -5.05000000000001 with farkas False. Dual variables are [14.0, -14.55555555555555, 4.2222222222223, 7.9444444444445, -6.888888888888888, -10.3333333333332, -6.3333333333333333, 3.222222222223, 8.66666666666666, 9.6666666666666, -0.0] currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Capacity is 30 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 PRICER C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 2 with load 8 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19

Path is currently at node 6 with load 5

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
```

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
```

Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21

```
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 8 with load [ 0 1 10 4 10 7 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 1, 10, 4, 10, 7, 11) with negative reduced cost
Added (0, 1, 10, 4, 10, 7, 11) with path weight 28
There are 1 occurences of node 1
There are 1 occurences of node 4
There are 1 occurences of node 7
There are 2 occurences of node 10
Dual variables are [14.0, -14.5555555555555555, 4.2222222222223, 1.0,
-6.888888888888888, -10.33333333333332, -6.3333333333333, 3.222222222222223
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
```

```
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 6 with load 5
PRICER C: Found path with load 13
Path is currently at node 8 with load 5
PRICER C: Found path with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER_C: Found path with load 18
```

```
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 6 with load 5
PRICER C: Found path with load 13
Path is currently at node 8 with load 5
PRICER C: Found path with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER_C: Found path with load 18
```

```
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
```

PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 2 with load 8 Path is currently at node 8 with load 5 PRICER C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 6 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 8 with load 5 PRICER_C: Capacity is 30 PRICER C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 PRICER_C: Found path with load 13 Path is currently at node 8 with load 5 PRICER_C: Found path with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 6 with load 5 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 8 with load 5 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30

```
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 9, 1, 10, 9, 11) with negative reduced cost
Added (0, 9, 1, 10, 9, 11) with path weight 25
There are 1 occurences of node 1
There are 2 occurences of node 9
There are 1 occurences of node 10
Dual variables are [14.0, -7.9545454545453, 8.772727272727273,
6.181818181818182, -3.36363636363636364, -3.8636363636363624, -3.727272727272727275,
4.9090909090909, 3.4545454545455, 4.090909090909, -0.0]
rently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
```

```
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
PRICER_C: Found path with load 12
Path is currently at node 3 with load 7
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
```

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
PRICER_C: Found path with load 12
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Capacity is 30
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER C: Found path with load 12
Path is currently at node 8 with load 5
PRICER C: Found path with load 12
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
```

PRICER_C: Capacity is 30 PRICER_C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 29 Path is currently at node 8 with load 5 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 19 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 16 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5

```
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 16
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
```

```
Path isLabelling found path (0, 3, 10, 1, 9, 11) with negative reduced cost
Added (0, 3, 10, 1, 9, 11) with path weight 18
There are 1 occurences of node 1
There are 1 occurences of node 3
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [4.96875, -6.75, 3.15625, 0.2604166666666661,
4.52083333333334, -1.104166666666666, 4.8125, 5.072916666666666, 4.4375,
5.4375, -0.0
currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
```

```
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
```

```
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with lo[ 0 7 9 7 9 7 9 7 9 7 11 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 7, 9, 7, 9, 7, 9, 7, 11) with negative reduced
cost
Added (0, 7, 9, 7, 9, 7, 9, 7, 11) with path weight 41
There are 5 occurences of node 7
There are 4 occurences of node 9
Dual variables are [5.088235294117647, -6.1764705882352935, 3.3235294117647056,
0.28431372549019684, 4.568627450980392, -0.9607843137254894, 4.764705882352941,
5.049019607843137, 4.294117647058823, 5.294117647058823, -0.0]
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
```

```
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
```

```
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
```

```
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
```

```
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 9 with loa[ 0 7 9 7 9 7 9 7 9 11 0 0 0
0 0 0 0 0 0 0 0 0
```

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0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost
Added (0, 7, 9, 7, 9, 7, 9, 11) with path weight 33
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node There are 4 occurences of node 7
There are 4 occurences of node 9
Dual variables are [5.59375, -3.79166666666666, 4.645833333333334,
0.692708333333333, 4.77083333333334, 0.26041666666666785, 4.5625,
6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
```

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Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
```

```
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is c[ 0 1 8 7 9 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0
                                 0 0
Labelling found path (0, 1, 8, 7, 9, 7, 9, 11) with negative reduced cost
Added (0, 1, 8, 7, 9, 7, 9, 11) with path weight 24
There are 1 occurences of node 1
There are 2 occurences of node 7
There are 1 occurences of node 8
There are 2 occurences of node 9
Dual variables are [6.861111111111111, -2.7777777777776, 6.166666666666666666,
4.6944444444445, 2.16666666666668, 2.80555555555555, -0.0]
urrently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
```

```
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 16
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Capacity is 30
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER[ 0 5 4 5 4 5 11 0 0 0 0
                                        0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0
                                        0 0 0]_C: Found path with load 24
                                  0
                                     0
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Рa
Labelling found path (0, 5, 4, 5, 4, 5, 11) with negative reduced cost
Added (0, 5, 4, 5, 4, 5, 11) with path weight 16
There are 2 occurences of node 4
There are 3 occurences of node 5
Dual variables are [6.519230769230766, -4.25, 4.865384615384617,
0.21153846153846256, 5.192307692307692, -0.11538461538461675,
```

```
3.8846153846153824, 4.865384615384617, 2.423076923076926, 4.192307692307692,
-0.0]
th is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER C: Capacity is 30
PRICER C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 16
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
```

```
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
PRICER_C: Found path with load 16
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currentl[ 0 5 10 3 10 6 11 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
  0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 5, 10, 3, 10, 6, 11) with negative reduced cost
Added (0, 5, 10, 3, 10, 6, 11) with path weight 18
There are 1 occurences of node 3
There are 1 occurences of node 5
There are 1 occurences of node 6
There are 2 occurences of node 10
Dual variables are [6.519230769230766, -4.25, 4.865384615384617,
0.21153846153846256, 5.192307692307692, -0.4423076923076916, 3.8846153846153824,
4.865384615384617, 2.423076923076926, 4.192307692307692, -0.0] y at node 8 with
load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
```

Path is currently at node 1 wit h load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5

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PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently a[ 0 5 1 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
  0 0 0 0 0 0 0 0 0 0
                                  0 0 0 0 0]t node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
```

```
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is curre
Labelling found path (0, 5, 1, 8, 7, 9, 11) with negative reduced cost
Added (0, 5, 1, 8, 7, 9, 11) with path weight 21
There are 1 occurences of node 1
There are 1 occurences of node 5
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [6.861111111111109, -3.138888888888893, 5.8055555555555554,
ntly at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
PRICER C: Found path with load 13
Path is currently at node 10 with load 6
PRICER C: Found path with load 16
Path is currently at node 1 with load 10
PRICER_C: Found path with load 11
Path is currently at node 9 with load 5
PRICER_C: Found path with load 12
Path is currently at node 10 wit[ 0 3 1 8 7 9 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]h load 6
PRICER_C: Found path with load 15
Path is currently at node 1 with load 10
PRICER_C: Found path with load 11
Path is currently at node 10 with load 6
PRICER_C: Found path with load 13
Path is currently at node 3 with load 7
PRICER C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
```

```
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path
Labelling found path (0, 3, 1, 8, 7, 9, 11) with negative reduced cost
Added (0, 3, 1, 8, 7, 9, 11) with path weight 23
 is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER C: Found path with load 20
Path is cuThere are 1 occurences of node 1
There are 1 occurences of node 3
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [6.666666666666666, -3.7708333333333, 5.27083333333334,
2.354166666666643, 3.27083333333357, 0.4375, 3.9583333333333326,
rrently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 1 with load 10
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Path is currently at node 9 with load 5 PRICER_C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27

```
Pat[0 1 8 7 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 1, 8, 7, 8, 7, 9, 11) with negative reduced cost
Added (0, 1, 8, 7, 8, 7, 9, 11) with path weight 26
h is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 10 with There are 1 occurences of node 1
There are 2 occurences of node 7
There are 2 occurences of node 8
There are 1 occurences of node 9
Dual variables are [4.750000000000007, -4.2499999999999, 5.7499999999999,
1.875000000000000, 3.749999999999, -0.9999999999938, 3.00000000000036,
5.7499999999996, 3.74999999999947, 3.75, -0.0]
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path wi[ 0 5 1 8 7 8 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
th load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently aLabelling found path (0, 5, 1, 8, 7, 8, 11) with negative
reduced cost
Added (0, 5, 1, 8, 7, 8, 11) with path weight 23
There are 1 occurences of node 1
There are 1 occurences of node 5
```

```
There are 1 occurences of node 7
There are 2 occurences of node 8
Dual variables are [4.750000000000007, -4.2499999999998, 5.7499999999999,
1.875000000000000, 3.749999999999, -0.9999999999938, 3.00000000000036,
5.7499999999996, 3.74999999999947, 3.75, -0.0]
t node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
```

```
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path [ 0 5 1 8 7 8 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] is currently at node 1 with
load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 1 wit
Labelling found path (0, 5, 1, 8, 7, 8, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
Dual variables are [4.7499999999999, -4.249999999999, 5.75000000000001,
1.875, 3.75, -0.999999999999982, 3.0, 5.75, 3.75000000000001,
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
```

Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER C: Found path with load 11 Path is currently at node 10 with load 6 PRICER C: Found path with load 13 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 PRICER_C: Found path with load 23 Path is currently at n[0 3 10 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0

```
0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 3, 10, 8, 7, 9, 11) with negative reduced cost
Added (0, 3, 10, 8, 7, 9, 11) with path weight 22
There are 1 occurences of node 3
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [4.7499999999999, -4.249999999999, 5.75000000000001,
1.875, 3.75, -0.999999999999982, 3.0, 5.75, 3.75000000000001,
3.74999999999999, -0.0]
ode 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

Path is currently at node 3 with load 7

```
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is c[ 0 3 10 8 7 9 11 0 0 0
                                        0 0 0 0 0 0 0 0 0 0 0 0
       0 0 0 0 0 0 0
urrently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
```

```
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load Labelling found path (0, 3, 10, 8, 7, 9,
11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0]
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
```

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with There are no paths with negative reduced costs
Dual variables are [6.666666666666666, -4.4242424242424, 4.8787878787879,
3.8787878787877, 1.48484848484862, -1.0, 3.69696969696972,
5.575757575757576, 2.18181818181817, 4.2727272727272725, -0.0]
load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currentl[ 0 1 8 7 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
                                  0 0 0 0] y at node 1 with load 10
  0 0 0 0 0 0 0 0 0 0
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Labelling found path (0, 1, 8, 7, 8, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -1.3939393939393945 with farkas
There are no paths with negative reduced costs
Dual variables are [6.071428571428571, -5.428571428571429, 2.5714285714285716,
4.392857142857143, 0.5714285714285712, -1.0, 3.785714285714286,
6.285714285714286, 4.2857142857142865, 5.071428571428571, -0.0]
currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
PRICER_C: Found path with load 17
```

Path is currently at node 1 with load 10 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 13 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23

```
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load [ 0 1 8 7 9 7 9 11 0 0 0 0 0
0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 1, 8, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -4.5 with farkas False.
There are no paths with negative reduced costs7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4
There are no paths with negative reduced costs
Dual variables are [6.105263157894737, -5.473684210526311, 2.5263157894736854,
4.421052631578942, 0.5263157894736894, -1.000000000000018, 3.8421052631578947,
6.263157894736841, 4.263157894736839, 5.105263157894738, -0.0]
 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
```

Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5

```
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path i[ 0 1 8 7 8 7 9 11 0
                                    0 0 0 0 0 0 0 0 0 0 0 0 0
                                 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]s currently at node 9 with load
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER C: Capacity is 30
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is current
Labelling found path (0, 1, 8, 7, 8, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -4.578947368421048 with farkas
Dual variables are [14.0, -3.7777777777777812, 8.1111111111111114,
6.77777777777778, -4.555555555555555555, -2.88888888888893, -2.666666666666666,
ly at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
```

PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6

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PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

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PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

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Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at nod[ 0 8 1 8 10 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 8, 1, 8, 10, 11) with negative reduced cost
Added (0, 8, 1, 8, 10, 11) with path weight 20
There are 1 occurences of node 1
There are 2 occurences of node 8
There are 1 occurences of node 10
Dual variables are [14.0, 2.25, 9.0, 4.4375, 0.125, 1.1875, -0.9375, 3.5625,
-3.875, -1.125, -0.0]
e 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
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PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6

```
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
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PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
```

Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6

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PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 3, 1, 8, 7, 11) with negative reduced cost
Added (0, 3, 1, 8, 7, 11) with path weight 25
There are 1 occurences of node 1
There are 1 occurences of node 3
There are 1 occurences of node 7
There are 1 occurences of node 8
Dual variables are [14.0, 2.25, 8.5833333333334, 4.33333333333333,
0.333333333333336, 1.083333333333334, -1.041666666666667, 3.4583333333333335,
ath is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26

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Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
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Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Capacity is 30
PRICER C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is curr[ 0 3 1 8 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
       Labelling found path (0, 3, 1, 8, 7, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
Dual variables are [5.64516129032258, -4.21774193548387, 4.185483870967742,
3.056451612903227, 2.185483870967741, -0.13709677419354804, 4.596774193548387,
4.919354838709678, 3.653225806451613, 4.516129032258064, -0.0]
ently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
```

Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5

Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5

```
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 wi[ 0 3 10 7 9 7 9 11 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0
                                       0 0 01th load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path
Labelling found path (0, 3, 10, 7, 9, 7, 9, 11) with negative reduced cost
Added (0, 3, 10, 7, 9, 7, 9, 11) with path weight 24
with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7

```
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currentlThere are 1 occurences of node 3
There are 2 occurences of node 7
There are 2 occurences of node 9
There are 1 occurences of node 10
Dual variables are [5.982456140350877, -4.070175438596495, 4.543859649122803,
2.8245614035087687, 2.5438596491228083, 0.052631578947366364, 4.385964912280701,
4.877192982456139, 3.2105263157894743, 4.263157894736846, -0.0]
y at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
```

PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Capacity is 30 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23

Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10

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Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently a[ 0 1 8 7 9 7 9 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 1, 8, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -2.0526315789473664 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]
There are no paths with negative reduced costs
Dual variables are [6.0625, -5.4999999999997, 2.500000000000018,
4.43749999999997, 0.50000000000000027, -1.0000000000000027, 3.8750000000000004,
t node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 23
```

Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6

```
PRICER_C: Found [ 0 1 8 7 9 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 1, 8, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -4.687499999999964 with farkas
False.
Dual variables are [-10.5, -23.5, -9.5, -10.5, 12.0, -39.5, 17.0, -3.5, -11.0,
12.0, -0.0]
path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Capacity is 30
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
```

Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Capacity is 30 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7

Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6

PRICER_C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24

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Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
```

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Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
```

PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7

```
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
```

```
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
```

```
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER C: Found path with load 16
Path is currently at node 10 with load 6
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
```

Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23

Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10

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Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at nod[ 0 7 5 7 10 7 10 7 9 11 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 7, 5, 7, 10, 7, 10, 7, 9, 11) with negative reduced
Added (0, 7, 5, 7, 10, 7, 10, 7, 9, 11) with path weight 51
There are 1 occurences of node 5
There are 4 occurences of node 7
There are 1 occurences of node 9
There are 2 occurences of node 10
-2.16666666666666, 17.0, -3.5, -11.0, -6.66666666666666, -0.0]
e 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
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Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5

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Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
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PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER C: Found path with load 18 Path is currently at node 1 with load 10 PRICER C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5

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Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
```

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Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
```

PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER C: Found path with load 16 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 2 with load 8 PRICER C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 21 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5

```
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with loa[ 0 7 8 7 8 7 8 7 11 0 0 0
0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]d 10
PRICER C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
```

```
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 2 with load 8
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Capacity is 30
PRICER C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently
Labelling found path (0, 7, 8, 7, 8, 7, 8, 7, 11) with negative reduced
```

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cost
Added (0, 7, 8, 7, 8, 7, 8, 7, 11) with path weight 49at node 10 with load
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
```

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node
7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
```

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at noThere are 5 occurences of node 7
There are 4 occurences of node 8
Dual variables are [2.20833333333332, -5.25, 9.0, 11.66666666666664,
-3.6666666666666643, -2.687499999999982, 6.0, 4.75, 1.0416666666666679, -1.0,
-0.07
de 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
```

```
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with[ 0 4 5 4 7 8 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is curre
Labelling found path (0, 4, 5, 4, 7, 8, 11) with negative reduced cost
Added (0, 4, 5, 4, 7, 8, 11) with path weight 26
There are 2 occurences of node 4
There are 1 occurences of node 5
There are 1 occurences of node 7
ntly at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 7
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 11
Path is currently at node 10 with load 6
PRICER_C: Found path with load 7
Path is currently at node 5 with load 5
PRICER C: Found path with load 8
Path is currently at node 10 with load 6
PRICER_C: Found path with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 13
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 13
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 13
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 14
Path is curThere are 1 occurences of node 8
Dual variables are [2.20833333333332, -5.25, 9.0, 11.6666666666666664,
-8.08333333333329, -2.687499999999982, 6.0, 4.75, 1.0416666666666679, -1.0,
-0.0]
rently at node 10 with load 6
```

Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 14 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 5 with load 5 PRICER_C: Found path with load 15 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2

```
Path is currently at node 5 with load 5
PRICER_C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 16
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at no[ 0 4 3 4 7 8 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 4, 3, 4, 7, 8, 11) with negative reduced cost
Added (0, 4, 3, 4, 7, 8, 11) with path weight 36
de 10 with load 6
PRICER C: Found path with load 16
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
```

```
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is curThere are 1 occurences of node 3
There are 2 occurences of node 4
There are 1 occurences of node 7
There are 1 occurences of node 8
Dual variables are [5.125, -5.25, 5.25, 10.0, -4.75, -1.4375, 6.0, 4.75, 1.875,
2.75, -0.0
rently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
```

Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 25 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER C: Found path with load 24 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 4 with load 6

Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 26 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6

```
0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 4, 10, 4, 9, 7, 9, 11) with negative reduced cost
Added (0, 4, 10, 4, 9, 7, 9, 11) with path weight 28
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currenThere are 2 occurences of node 4
There are 1 occurences of node 7
There are 2 occurences of node 9
There are 1 occurences of node 10
Dual variables are [5.57499999999999, -5.25, 6.14999999999995, 9.55,
-3.85000000000014, -0.3125, 6.0, 4.75, 0.5249999999995, 1.8500000000000000
-0.07
tly at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

Path is currently at node 7 with load 2[0 4 10 4 9 7 9 11 0 0 0 0

```
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

```
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found pa[ 0 4 6 4 6 4 7 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 4, 6, 4, 6, 4, 7, 11) with negative reduced cost
Added (0, 4, 6, 4, 6, 4, 7, 11) with path weight 32
th with load 23
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
```

Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2There are 3 occurences of node 4
There are 2 occurences of node 6
There are 1 occurences of node 7
Dual variables are [5.57499999999999, -5.25, 6.14999999999999, 9.55, -3.850000000000014, -1.32500000000001, 6.0, 4.75, 0.52499999999995, 1.8500000000000005, -0.0]

Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
```

```
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is c[ 0 4 1 8 7 8 7 11 0 0
                                        0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] urrently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at
Labelling found path (0, 4, 1, 8, 7, 8, 7, 11) with negative reduced cost
```

```
Added (0, 4, 1, 8, 7, 8, 7, 11) with path weight 35
There are 1 occurences of node 1
There are 1 occurences of node 4
There are 2 occurences of node 7
There are 2 occurences of node 8
Dual variables are [5.25, -5.25, 5.5, 8.25, -2.0, 0.5, 6.0, 4.75, 1.5, 2.5,
-0.07
node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 14
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 14
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 19
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 8 with load 5
Path is cur[ 0 3 10 7 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]rently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with lo
Labelling found path (0, 3, 10, 7, 8, 7, 9, 11) with negative reduced cost
Added (0, 3, 10, 7, 8, 7, 9, 11) with path weight 26
There are 1 occurences of node 3
There are 2 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [5.12499999999999, -5.250000000000036, 5.2499999999999,
8.375, -2.25, 0.4375, 6.000000000000002, 4.749999999999, 1.2499999999991,
```

```
2.75, -0.0
ad 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
```

```
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
```

```
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
```

```
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at[ 0 7 8 7 8 7 8 7 8 7 11 0 0 0 0 0 0 0
0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Labelling found path (0, 7, 8, 7, 8, 7, 8, 7, 11) with negative reduced
cost
Path already in variables with reduced cost -0.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]
There are no paths with negative reduced costs
```

```
Dual variables are [-4.8, -10.2, 3.6, 8.8, -9.600000000000001, 1.0,
-0.6000000000000001, 13.0, -3.600000000000014, -5.0, -0.0] th is currently at
node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with
load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node [ 0 8 7 8 7 8 7 8 7 11 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Labelling found path (0, 8, 7, 8, 7, 8, 7, 8, 7, 11) with negative reduced cost
Added (0, 8, 7, 8, 7, 8, 7, 8, 7, 11) with path weight 45
There are 4 occurences of node 7
There are 4 occurences of node 8
Dual variables are [-2.5, -6.75, 4.75, 9.375, -10.75, 1.0, -1.75, 13.0, -4.75,
-5.0, -0.0]
is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 13
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
```

PRICER_C: Found path with load 18 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30

```
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
```

```
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 7 with lo[ 0 8 7 8 7 8 7 8 11 0 0 0 0 0
0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 8, 7, 8, 7, 8, 7, 8, 11) with negative reduced cost
Path already in variables with reduced cost -9.75 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0]
ad 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 wiThere are no paths with negative reduced costs
th load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at nodDual variables are [-4.8, -10.2, 3.6, 8.8,
-9.60000000000001, 1.0, -0.60000000000001, 13.0, -3.60000000000014, -5.0,
-0.07
e 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 13
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

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Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently [ 0 8 7 8 7 8 7 8 7 11 0 0 0 0 0 0 0 0
0 0 0 0
  0 0 0 0 0 0 0 0 0 0
                                  0 0 0 0] at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is current
Labelling found path (0, 8, 7, 8, 7, 8, 7, 8, 7, 11) with negative reduced cost
Path already in variables with reduced cost -4.60000000000001 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]
ly at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRIThere are no paths with negative reduced costs
Dual variables are [-40.0, -63.0, -10.0, -12.0, 12.0, -13.0, 17.0, 13.0, -16.0,
-9.5, -0.0
CER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
```

Path is currently at node 7 with load 2 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Capacity is 30 PRICER C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 28 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30

Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 29 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22

```
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
```

```
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
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PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2

Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 29 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6

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Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at [ 0 7 8 7 8 7 8 7 8 7 11 0 0 0 0 0 0 0 0
0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Labelling found path (0, 7, 8, 7, 8, 7, 8, 7, 11) with negative reduced
cost
Path already in variables with reduced cost -88.0 with farkas False.
Dual variables are [7.544827586206894, -8.013793103448279, 3.427586206896549,
3.1172413793103395, 0.9862068965517281, -4.151724137931035, 1.5586206896551724,
```

```
5.137931034482756, 5.3310344827586205, 6.793103448275865, -0.0]rrently at node 7
with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is
currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
```

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Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Capacity is 30
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 10, 8, 1, 9, 11) with negative reduced costICER_C:
Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
```

```
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path
Added (0, 10, 8, 1, 9, 11) with path weight 21
There are 1 occurences of node 1
There are 1 occurences of node 8
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [6.2, -5.6, 3.799999999999, 3.00000000000001,
is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

```
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is c[ 0 8 1 8 7 9 11 0 0 0
                                                                                       0 0 0 0 0 0 0 0 0 0 0 0
           \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \ \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 
                                                                                        0 0 0]urrently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with lo
Labelling found path (0, 8, 1, 8, 7, 9, 11) with negative reduced cost
Added (0, 8, 1, 8, 7, 9, 11) with path weight 23
There are 1 occurences of node 1
There are 1 occurences of node 7
There are 2 occurences of node 8
There are 1 occurences of node 9
Dual variables are [7.05263157894737, -5.7894736842105265, 4.36842105263158,
2.526315789473685, 2.3684210526315788, -1.1578947368421053, 2.8421052631578947,
4.368421052631579, 4.368421052631579, 5.2105263157894735, -0.0]
ad 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
```

```
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at nod[ 0 10 3 10 7 9 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
    0 0 0 0 0 0 0 0
                                        0 0 0]e 4 with load 6
                                  0
                               0
Path is currently at node 6 with load 5
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

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Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is curren
Labelling found path (0, 10, 3, 10, 7, 9, 11) with negative reduced cost
Added (0, 10, 3, 10, 7, 9, 11) with path weight 21
There are 1 occurences of node 3
There are 1 occurences of node 7
There are 1 occurences of node 9
There are 2 occurences of node 10
tly at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Dual variables are [7.526315789473687, -5.894736842105264, 4.684210526315791,
2.2631578947368407, 2.684210526315791, -1.5789473684210495, 2.421052631578945,
4.684210526315786, 3.684210526315791, 5.105263157894736, -0.0]
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
```

```
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 10, 3, 10, 8, 11) with negative reduced cost
Added (0, 10, 3, 10, 8, 11) with path weight 19
There are 1 occurences of node 3
```

```
There are 1 occurences of node 8
There are 2 occurences of node 10
Dual variables are [7.5, -5.5, 4.5, 2.5, 2.5, -1.0, 2.5, 4.5, 4.0, 5.0, -0.0]
currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 11
Path is currently at node 8 with load 5
PRICER_C: Found path with load 16
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] with load 12
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 6 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at n
Labelling found path (0, 10, 3, 10, 3, 11) with negative reduced cost
Added (0, 10, 3, 10, 3, 11) with path weight 14
There are 2 occurences of node 3
There are 2 occurences of node 10
Dual variables are [8.19444444444445, -4.722222222222, 3.27777777777778,
4.36111111111112, 1.277777777777777, 1.194444444444429, 2.4444444444444438,
3.27777777777777, 5.80555555555556, 3.7222222222222, -0.0]
ode 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

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Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load [ 0 1 9 7 9 7 9 11 0 0 0 0 0
0 0 0 0 0 0 0 0 0
  Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currentl
Labelling found path (0, 1, 9, 7, 9, 7, 9, 11) with negative reduced costy at
node 7 with load 2
PRICER_C: Capacity is 30
PRICER C: Found path with load 11
Path is currently at node 8 with load 5
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 18
```

```
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path
Added (0, 1, 9, 7, 9, 7, 9, 11) with path weight 24
There are 1 occurences of node 1
There are 2 occurences of node 7
There are 3 occurences of node 9
Dual variables are [9.9999999999999, -4.0, 3.9999999999996, 5.0, 1.0, 2.5,
is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
```

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Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 28
Path is currently at nod[ 0 6 4 1 9 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]e 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is curre
Labelling found path (0, 6, 4, 1, 9, 11) with negative reduced cost
Added (0, 6, 4, 1, 9, 11) with path weight 18
There are 1 occurences of node 1
There are 1 occurences of node 4
There are 1 occurences of node 6
There are 1 occurences of node 9
Dual variables are [10.0, -4.0, 4.0, 5.0, 1.0, -1.0, 1.0000000000000004, 4.0,
4.0, 3.0, -0.0]ntly at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
```

```
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with loa
d 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 11
Path is currently at node 8 with load 5
PRICER_C: Found path with load 16
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 22
[ 0 5 4 1 8 11 0 0 0 0 0
                                        0 0 0 0 0 0 0 0 0 0
                                  0
                                     0
       0 0 0 0 0 0 0 0
                                  0
                                     0
                                        0
                                           0
                                             01
Labelling found path (0, 5, 4, 1, 8, 11) with negative reduced cost
Added (0, 5, 4, 1, 8, 11) with path weight 17Path is currently at node 6 with
load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path
There are 1 occurences of node 1
There are 1 occurences of node 4
There are 1 occurences of node 5
There are 1 occurences of node 8
Dual variables are [9.9999999999999, -4.0, 3.9999999999996, 2.0, 1.0,
2.00000000000018, 1.00000000000009, 4.00000000000002, 4.0,
3.000000000000004, -0.0
with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
[ 0 1 10 3 10 11 0 0 0 0 0 0
                                     0
                                        0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0
                                  0
                                     0
                                        0 0 0]Path is currently at node 7
with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at n
Labelling found path (0, 1, 10, 3, 10, 11) with negative reduced cost
Added (0, 1, 10, 3, 10, 11) with path weight 15
There are 1 occurences of node 1
There are 1 occurences of node 3
There are 2 occurences of node 10
Dual variables are [5.666666666666666, -3.99999999999999, 4.6666666666666666,
4.3333333333333, 2.00000000000001, 4.0, 5.66666666666666, 4.6666666666666,
2.3333333333333333333333333333333333334, -0.0]
ode 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 7
Path is currently at node 8 with load 5
PRICER C: Found path with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 12
Path is currently at node 5 with load 5
```

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 13
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 18
Path is currently at node 10[ 0 1 8 7 8 7 9 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0
    Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 14
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 14
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at n
Labelling found path (0, 1, 8, 7, 8, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -2.6666666666666643 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]
ode 8 with load 5
PRICER C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently There are no paths with negative reduced costs
Dual variables are [5.019607843137258, -4.607843137254905, 3.3921568627450966,
```

```
6.421568627450981, -1.9117647058823568, 0.5490196078431406, 2.3725490196078436,
7.470588235294118, 4.745098039215685, 3.2941176470588225, -0.0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 4 with load 6
Path is
Labelling found path (0, 8, 1, 8, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -4.078431372549023 with farkas
False.
There are no paths with negative reduced costs
Dual variables are [4.40625, -4.84375, 3.15625, 5.1875, 0.21875, 0.21875, 2.75,
7.1875, 5.5, 3.71875, -0.0] currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 8 with load
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currentl[ 0 1 8 7 9 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 1, 8, 7, 9, 7, 9, 11) with negative reduced costy at
node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at noPath already in variables with reduced cost -4.09375 with
farkas False.
There are no paths with negative reduced costs
Dual variables are [6.125, -5.5499999999999, 2.45000000000001,
5.525000000000002, -0.825000000000011, 0.27500000000000213, 4.10000000000001,
6.17499999999999, 4.1499999999999, 4.5499999999999, -0.0]
de 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
```

```
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
```

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load[ 0 1 8 7 8 7 10 11 0 0 0 0 0
  0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at
Labelling found path (0, 1, 8, 7, 8, 7, 10, 11) with negative reduced cost
Added (0, 1, 8, 7, 8, 7, 10, 11) with path weight 27
There are 1 occurences of node 1
There are 2 occurences of node 7
There are 2 occurences of node 8
There are 1 occurences of node 10
Dual variables are [7.236842105263159, -5.105263157894736, 2.8947368421052637,
5.302631578947368, -0.15789473684210442, 0.4210526315789451, 3.2105263157894726,
4.618421052631577, 5.039473684210527, 4.105263157894736, -0.0]
node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
```

```
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at no[ 0 1 9 7 9 7 9 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]de 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is
currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at nodLabelling found path (0, 1, 9, 7, 9, 7, 9, 11) with
negative reduced cost
Path already in variables with reduced cost -4.776315789473685 with farkas
False.
with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
PRICER C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 10 with
load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 2There are no paths with negative reduced costs
Dual variables are [7.3333333333333334, -5.3333333333334, 4.333333333333334,
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with 1[ 0 10 3 10 3 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]oad 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
```

```
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at no
Labelling found path (0, 10, 3, 10, 3, 11) with negative reduced cost
Path already in variables with reduced cost -4.6666666666666 with farkas
False.
Dual variables are [3.11111111111111, -1.6666666666666665, 9.0,
8.33333333333332, -0.222222222222143, -0.499999999999982, 8.0,
1.5555555555555554, -0.44444444444445, -2.0, -0.0]
de 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
```

Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Capacity is 30 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20

Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Capacity is 30 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6

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Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 9 with 1[0745479110000000
0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]oad 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
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PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at nod
Labelling found path (0, 7, 4, 5, 4, 7, 9, 11) with negative reduced cost
Added (0, 7, 4, 5, 4, 7, 9, 11) with path weight 31
There are 2 occurences of node 4
There are 1 occurences of node 5
There are 2 occurences of node 7
There are 1 occurences of node 9
Dual variables are [3.11111111111111, -1.6666666666666666, 9.0,
7.58333333333333, 0.277777777777777857, 0.625000000000018, 8.0,
1.5555555555555554, -0.444444444444445, -2.0, -0.0]e 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
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Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currentl y at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5

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Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
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Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Capacity is 30 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6

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Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICE[ 0 7 4 5 4 5 4 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]R_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
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Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is curr
Labelling found path (0, 7, 4, 5, 4, 5, 4, 11) with negative reduced cost
Added (0, 7, 4, 5, 4, 5, 4, 11) with path weight 31
There are 3 occurences of node 4
There are 2 occurences of node 5
There are 1 occurences of node 7
Dual variables are [3.11111111111111, -1.666666666666665, 9.0, 7.4,
-0.444444444444445, -2.0, -0.0]
ently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
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PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10

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Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
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Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
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Path is currently at node 9 with load 5 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 PRICER C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23

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Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
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Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
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Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]PRICER_C: Found path with load
29
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Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
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PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load
Labelling found path (0, 4, 5, 4, 5, 4, 7, 11) with negative reduced cost
Added (0, 4, 5, 4, 5, 4, 7, 11) with path weight 28
There are 3 occurences of node 4
There are 2 occurences of node 5
There are 1 occurences of node 7
Dual variables are [3.11111111111111, -1.666666666666666, 9.0,
-2.0, -0.0
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 27

Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26

```
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]PRICER_C: Found path with load
```

```
15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER
Labelling found path (0, 3, 10, 3, 7, 8, 7, 11) with negative reduced cost
Added (0, 3, 10, 3, 7, 8, 7, 11) with path weight 32
There are 2 occurences of node 3
There are 2 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 10
Dual variables are [3.11111111111111, -1.6666666666666665, 9.0,
-3.5555555555555554, -0.0]
C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
```

PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2

```
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
```

```
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path [ 0 3 7 3 7 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
       0 0 0 0 0 0 0 0 0 0 0 0 0 0] is currently at node 10 with
load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
```

```
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path
Labelling found path (0, 3, 7, 3, 7, 8, 7, 9, 11) with negative reduced cost
Added (0, 3, 7, 3, 7, 8, 7, 9, 11) with path weight 42
There are 2 occurences of node 3
There are 3 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [3.11111111111111, -1.666666666666666, 9.0,
6.1666666666667, 0.75, 2.75, 8.0, 0.4444444444445, -0.4444444444445,
-2.44444444444446, -0.0]
is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
```

PRICER_C: Found path with load 22

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
```

Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is curren[ 0 3 7 3 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
       0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 3, 7, 3, 7, 3, 7, 11) with negative reduced cost
Added (0, 3, 7, 3, 7, 3, 7, 11) with path weight 50
There are 3 occurences of node 3
There are 3 occurences of node 7
Dual variables are [3.20833333333334, -1.375, 8.958333333333332,
6.4583333333334, 0.458333333333339, 2.4583333333334, 7.70833333333333,
1.2083333333333357, -0.25, -2.5416666666666643, -0.0]
tly at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
```

Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2

```
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently[ 0 2 7 9 7 3 10 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is curre
Labelling found path (0, 2, 7, 9, 7, 3, 10, 11) with negative reduced cost
Added (0, 2, 7, 9, 7, 3, 10, 11) with path weight 20
There are 1 occurences of node 2
There are 1 occurences of node 3
There are 2 occurences of node 7
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [3.208333333333334, -1.375, 8.958333333333333,
6.4583333333334, 0.458333333333339, 2.4583333333334, 7.70833333333333,
1.208333333333357, -0.25, -2.74999999999999, -0.0]
ntly at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
```

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
```

PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5

```
PRICER_C: Found path with load 22
Path is currently at node 9 with[ 0 2 7 3 7 3 7 11 0 0 0 0 0 0 0
0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at no
Labelling found path (0, 2, 7, 3, 7, 3, 7, 11) with negative reduced cost
Added (0, 2, 7, 3, 7, 3, 7, 11) with path weight 39
There are 1 occurences of node 2
There are 2 occurences of node 3
There are 3 occurences of node 7
Dual variables are [3.666666666666668, -2.0, 9.0, 6.166666666666668,
0.9166666666666661, 2.916666666666666, 7.666666666666666, 1.0, -0.0,
-2.333333333333332, -0.0
de 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
```

Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30

```
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at n[ 0 3 10 3 7 9 7 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0
                                  0 0
                                        0 0 0]ode 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is c
Labelling found path (0, 3, 10, 3, 7, 9, 7, 11) with negative reduced cost
Added (0, 3, 10, 3, 7, 9, 7, 11) with path weight 30
There are 2 occurences of node 3
There are 2 occurences of node 7
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [3.66666666666668, -2.0, 9.0, 6.16666666666668,
0.9166666666666661, 2.916666666666666, 7.66666666666666, 1.0, -0.0,
-3.3333333333333, -0.0]
urrently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node[ 0 3 7 3 7 9 7 9 11 0 0 0 0 0 0 0 0
```

```
0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10
Labelling found path (0, 3, 7, 3, 7, 9, 7, 9, 11) with negative reduced cost
Added (0, 3, 7, 3, 7, 9, 7, 9, 11) with path weight 40
There are 2 occurences of node 3
There are 3 occurences of node 7
There are 2 occurences of node 9
Dual variables are [4.166666666666668, -2.0, 9.0, 6.16666666666668,
0.9166666666666661, 2.91666666666666, 7.66666666666666, 1.5, -0.5,
-2.8333333333332, -0.0]
with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
```

```
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is current[ 0 3 7 1 7 3 7 11 0 0
                                             0 0 0 0 0 0 0 0 0 0
  0 0
  0
    0 0 0 0 0 0 0 0 0
                                        0 0 0]ly at node 5 with load 5
                                  0
                                     0
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

```
Path is currently at node 3 with load 7
Path
Labelling found path (0, 3, 7, 1, 7, 3, 7, 11) with negative reduced cost
Added (0, 3, 7, 1, 7, 3, 7, 11) with path weight 44
There are 1 occurences of node 1
There are 2 occurences of node 3
There are 3 occurences of node 7
Dual variables are [3.0, -2.0, 9.0, 6.1666666666666, 0.9166666666666661,
2.91666666666666, 7.66666666666666, 1.5, -0.5, -2.83333333333333, -0.0]
is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
```

```
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with 1[ 0 4 5 4 5 4 7 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]oad 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
```

```
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at n
Labelling found path (0, 4, 5, 4, 5, 4, 7, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
Dual variables are [8.1818181818182, -5.3636363636363, 2.636363636363636,
4.8409090909091, -1.113636363636363, -1.0, 1.5, 5.090909090909091,
5.5909090909091, 5.636363636363637, -0.0]
ode 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
```

```
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at [ 0 9 1 8 10 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0
                                        0 0 0]node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRIC
Labelling found path (0, 9, 1, 8, 10, 11) with negative reduced cost
Added (0, 9, 1, 8, 10, 11) with path weight 20
ER_C: Capacity is 30
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 wiThere are 1 occurences of node 1
There are 1 occurences of node 8
There are 1 occurences of node 9
There are 1 occurences of node 10
```

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Dual variables are [7.0285714285714285, -5.228571428571429, 4.685714285714286,
6.385714285714284, -1.2714285714285705, -0.7428571428571411, 3.0857142857142854,
4.5142857142857125, 3.685714285714287, 4.771428571428571, -0.0]
th load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
```

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Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
[ 0 3 10 4 10 6 11 0 0 0
                                           0 0 0 0 0 0 0 0 0
                               0
                                  0
                                     0
                                        0
  0 0 0 0 0 0 0 0 0 0
                                  0
                                     0
                                        0 0
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
```

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Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 wLabelling found path (0, 3, 10, 4, 10, 6, 11) with
negative reduced cost
Added (0, 3, 10, 4, 10, 6, 11) with path weight 19
There are 1 occurences of node 3
There are 1 occurences of node 4
There are 1 occurences of node 6
There are 2 occurences of node 10
Dual variables are [7.028571428571427, -5.228571428571427, 4.685714285714286,
6.3857142857142835, -1.2714285714285687, -1.6142857142857103, 3.085714285714287,
4.514285714285713, 3.685714285714286, 4.7714285714285705, -0.0]ith load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found
```

path with load 27 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10

```
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node [ 0 10 3 10 3 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 10, 3, 10, 3, 11) with negative reduced cost3 with load
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found pat
Path already in variables with reduced cost -4.914285714285711 with farkas
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]
There are no paths with negative reduced costsh with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
```

```
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is curr
Dual variables are [6.818181818181817, -5.1818181818182, 4.545454545454545,
6.4090909090907, -1.3181818181818186, -1.59090909090908, 3.272727272727272734,
4.818181818181818, 3.545454545454546, 4.818181818181818, -0.0]
ently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
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Path is currently at node 7 with load 2
Path is currently at[ 0 3 10 4 10 6 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
 Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRIC
Labelling found path (0, 3, 10, 4, 10, 6, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
2.66666666666666, -1.16666666666666, -1.0, -0.66666666666667,
ER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

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Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
```

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Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currentl[ 0 10 6 10 7 10 8 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
```

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0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]y at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path
Labelling found path (0, 10, 6, 10, 7, 10, 8, 11) with negative reduced cost
Added (0, 10, 6, 10, 7, 10, 8, 11) with path weight 29
There are 1 occurences of node 6
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 3 occurences of node 10
6.047619047619047, -4.547619047619047, -4.3809523809523805, -4.285714285714286,
1.666666666666665, 4.095238095238095, 12.0, -0.0]
is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
```

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Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
```

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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with 1[ 0 10 8 10 4 5 11 0 0 0 0 0 0 0
  0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0
                                        0 0 0]oad 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
```

```
Path is currently at node 10 with load 6
Path is currently at no
Labelling found path (0, 10, 8, 10, 4, 5, 11) with negative reduced cost
Added (0, 10, 8, 10, 4, 5, 11) with path weight 27
There are 1 occurences of node 4
There are 1 occurences of node 5
There are 1 occurences of node 8
There are 2 occurences of node 10
6.047619047619047, -4.7142857142857135, -4.3809523809523805, -4.285714285714286,
1.666666666666665, 4.095238095238095, 12.0, -0.0]
de 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Capacity is 30 PRICER C: Found path with load 17 Path is currently at node 3 with load 7 PRICER C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 16 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6

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Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at nod[ 0 10 4 10 8 10 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0
e 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

```
Path is currLabelling found path (0, 10, 4, 10, 8, 10, 11) with negative reduced
cost
Added (0, 10, 4, 10, 8, 10, 11) with path weight 26
There are 1 occurences of node 4
There are 1 occurences of node 8
There are 3 occurences of node 10
Dual variables are [1.9565217391304355, -7.347826086956522, -7.652173913043478,
2.9130434782608696, -1.4130434782608696, -0.26086956521739113,
-0.8695652173913047, -12.91304347826087, 5.521739130434782, 12.0, -0.0]
ently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
```

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Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 16 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6

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Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currentl[ 0 10 6 10 7 10 7 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
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0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]y at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Pat
Labelling found path (0, 10, 6, 10, 7, 10, 7, 11) with negative reduced cost
Added (0, 10, 6, 10, 7, 10, 7, 11) with path weight 33
There are 1 occurences of node 6
There are 2 occurences of node 7
There are 3 occurences of node 10
Dual variables are [1.434782608695654, -7.521739130434785, -7.478260869565215,
2.8695652173913055, -1.3695652173913055, -0.3913043478260865,
-1.304347826086957, -12.869565217391305, 5.782608695652173, 12.0, -0.0]
h is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
```

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Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
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Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
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Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
```

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Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path [ 0 10 6 10 7 10 6 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] is currently at node 7 with
load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
```

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Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node
Labelling found path (0, 10, 6, 10, 7, 10, 6, 11) with negative reduced cost
Added (0, 10, 6, 10, 7, 10, 6, 11) with path weight 26
There are 2 occurences of node 6
There are 1 occurences of node 7
There are 3 occurences of node 10
Dual variables are [-4.49999999999964, -9.5, -5.5, 2.375000000000001,
-0.8750000000000009, -1.87499999999991, -6.2499999999998, -12.375,
8.74999999999998, 12.0, -0.0]
7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
```

```
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
```

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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
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Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Capacity is 30 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 16 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2

```
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 wi[ 0 10 9 10 9 10 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 10, 9, 10, 9, 10, 11) with negative reduced cost
Added (0, 10, 9, 10, 9, 10, 11) with path weight 40
There are 2 occurences of node 9
There are 3 occurences of node 10
Dual variables are [-2.25, -9.5, -5.5, 5.75, -4.25, -5.25, 0.5, -15.75, 2.0,
12.0, -0.0]
th load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is current[ 0 10 4 10 7 10 7 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 10, 4, 10, 7, 10, 7, 11) with negative reduced cost
Added (0, 10, 4, 10, 7, 10, 7, 11) with path weight 35
There are 1 occurences of node 4
There are 2 occurences of node 7
There are 3 occurences of node 10
Dual variables are [3.285714285714286, -11.714285714285715, -3.2857142857142856,
2.4285714285714284, -0.9285714285714284, -4.142857142857143,
-1.7142857142857142, -12.428571428571429, 2.0, 12.0, -0.0]
ly at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
```

Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load [ 0 10 4 10 7 10 7 11 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 10, 4, 10, 7, 10, 7, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
Dual variables are [10.0, -6.0, 9.0, 7.5, -4.5, -4.5, 2.0, 4.0, 5.0, 1.0, -0.0]
28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
```

Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Capacity is 30 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7

Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5

Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 PRICER C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER C: Found path with load 25 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30

```
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node[ 0 3 10 3 10 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0
9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at nodeLabelling found path (0, 3, 10, 3, 10, 11) with
negative reduced cost
Path already in variables with reduced cost -7.0 with farkas False.
-1.333333333333333, -2.75, 5.66666666666666, 11.0, 6.0, -0.0] 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5

```
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6

Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2

```
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER C: Found path wi[ 0 9 4 9 7 9 7 9 11 0 0 0 0 0 0 0 0
0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 9, 4, 9, 7, 9, 7, 9, 11) with negative reduced cost
Added (0, 9, 4, 9, 7, 9, 7, 9, 11) with path weight 31
There are 1 occurences of node 4
There are 2 occurences of node 7
There are 4 occurences of node 9
th load 16
Path is currently at node 10 with load 6
PRICER C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 17
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 14
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
```

Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 22

Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 19 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6

```
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with 1[ 0 9 7 9 7 9 7 9 11 0 0 0 0 0
0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]oad 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
```

```
Path is currently at node 6 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
PRICER C: Found path with load 12
Path is currently at node 10 with load 6
PRICER C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with loa
Labelling found path (0, 9, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost
Added (0, 9, 7, 9, 7, 9, 7, 9, 11) with path weight 29
There are 3 occurences of node 7
There are 4 occurences of node 9
Dual variables are [-3.0, -4.3333333333334, 1.33333333333334, -3.0,
0.33333333333333, -1.333333333333333, -5.0, 5.66666666666666, 11.0, 6.0,
-0.0]
d 6
PRICER_C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 17
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 17
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
```

PRICER_C: Found path with load 23

Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22

```
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Pat[0 9 5 9 5 9 6 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 9, 5, 9, 5, 9, 6, 11) with negative reduced cost
Added (0, 9, 5, 9, 5, 9, 6, 11) with path weight 31
There are 2 occurences of node 5
There are 1 occurences of node 6
There are 3 occurences of node 9
Dual variables are [-3.0, -4.33333333333334, 1.333333333333334, -3.0,
-0.333333333333337, -1.333333333333333, -5.0, 5.666666666666666, 11.0, 6.0,
-0.0]
h is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
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PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 PRICER_C: Found path with load 12 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 17 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 17 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6

PRICER_C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23

```
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER [ 0 9 10 9 5 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 9, 10, 9, 5, 9, 11) with negative reduced cost
Added (0, 9, 10, 9, 5, 9, 11) with path weight 33
There are 1 occurences of node 5
There are 3 occurences of node 9
There are 1 occurences of node 10
Dual variables are [-3.0, -4.333333333333334, 1.33333333333334, -3.0, -6.0,
-1.3333333333333333, -5.0, 5.6666666666666, 11.0, 6.0, -0.0]
C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
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PRICER_C: Found path with load 29 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Capacity is 30 PRICER C: Found path with load 16 Path is currently at node 10 with load 6 PRICER_C: Found path with load 11 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5

Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 17 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6

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PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is curre[0 9 10 8 10 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
                                        0 0 0]ntly at node 9 with load 5
    0 0 0 0 0 0 0 0 0
                                     0
                                  0
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Labelling found path (0, 9, 10, 8, 10, 9, 11) with negative reduced cost
Added (0, 9, 10, 8, 10, 9, 11) with path weight 33
There are 1 occurences of node 8
There are 2 occurences of node 9
There are 2 occurences of node 10
Dual variables are [-3.0, -6.0, 3.0, -3.0, -6.0, -1.3333333333333333, -5.0,
```

```
-1.0, 11.0, 6.0, -0.0]
ath is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at n[ 0 9 10 9 10 9 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]ode 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Labelling found path (0, 9, 10, 9, 10, 9, 11) with negative reduced cost
Added (0, 9, 10, 9, 10, 9, 11) with path weight 39
There are 3 occurences of node 9
There are 2 occurences of node 10
Dual variables are [1.800000000000007, -4.8000000000001, -2.9999999999994,
1.800000000000007, 1.5, 0.50000000000027, -0.200000000000107,
-0.99999999999964, 7.4, 8.3999999999999, -0.0]
CER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
```

Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 PRICER_C: Found path with load 11 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 17 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER C: Found path with load 14 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load [0 10 6 10 6 10 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

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0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 10, 6, 10, 6, 11) with negative reduced cost
Added (0, 10, 6, 10, 6, 10, 11) with path weight 20
There are 2 occurences of node 6
There are 3 occurences of node 10
Dual variables are [1.80000000000007, -4.800000000001, -2.9999999999964,
1.8000000000000007, 1.5, -2.599999999999, -0.2000000000000107,
-0.99999999999964, 7.4, 8.399999999999, -0.0]
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
```

```
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with 1[ 0 10 4 10 4 10 11 0 0 0 0 0 0 0
  0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]oad 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
```

```
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currentl
Labelling found path (0, 10, 4, 10, 4, 10, 11) with negative reduced cost
Added (0, 10, 4, 10, 4, 10, 11) with path weight 24
There are 2 occurences of node 4
There are 3 occurences of node 10
Dual variables are [1.80000000000007, -4.800000000001, -2.9999999999964,
-0.59999999999999, 2.3999999999986, -2.599999999999,
-0.200000000000107, 1.40000000000021, 7.4, 8.3999999999999, -0.0]
y at node 6 with load 5
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
```

```
Path is currently at node 6 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 11
Path is curre[ 0 10 3 10 6 10 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] ntly at node 10 with load 6
PRICER C: Found path with load 11
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 17
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 17
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Fou
Labelling found path (0, 10, 3, 10, 6, 10, 11) with negative reduced cost
Added (0, 10, 3, 10, 6, 10, 11) with path weight 18
There are 1 occurences of node 3
There are 1 occurences of node 6
There are 3 occurences of node 10
Dual variables are [1.800000000000007, -3.1999999999999, -4.5999999999999,
-0.59999999999999, 2.3999999999986, -2.599999999999,
-0.200000000000107, 1.40000000000021, 7.4, 8.3999999999999, -0.0]
nd path with load 23
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path i[ 0 9 7 9 7 9 10 11 0 0 0
                                       0 0
                                             0
                                                0 0 0 0
  Labelling found path (0, 9, 7, 9, 7, 9, 10, 11) with negative reduced cost
Added (0, 9, 7, 9, 7, 9, 10, 11) with path weight 30
s currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with 1There are 2 occurences of node 7
```

```
There are 3 occurences of node 9
There are 1 occurences of node 10
oad 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currentDual variables are [1.80000000000007, -3.199999999999999,
-4.599999999999, -0.59999999999979, 2.39999999999986, -2.5999999999999,
-0.3000000000000007, 1.4000000000000021, 7.4, 8.39999999999999, -0.0]
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]ly at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with 1
Labelling found path (0, 9, 1, 9, 7, 9, 11) with negative reduced cost
Added (0, 9, 1, 9, 7, 9, 11) with path weight 23
There are 1 occurences of node 1
There are 1 occurences of node 7
There are 3 occurences of node 9
Dual variables are [1.099999999999999, -3.199999999999, -4.599999999999,
-0.59999999999999, 2.3999999999986, -2.599999999999,
-0.300000000000007, 1.400000000000021, 7.4, 8.3999999999999, -0.0]
oad 6
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER_C: Foun[ 0 9 7 9 10 6 10 11 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 9, 7, 9, 10, 6, 10, 11) with negative reduced cost
```

```
Added (0, 9, 7, 9, 10, 6, 10, 11) with path weight 28
There are 1 occurences of node 6
There are 1 occurences of node 7
There are 2 occurences of node 9
There are 2 occurences of node 10
Dual variables are [1.09999999999999, -3.89999999999986,
-3.89999999999986, -0.599999999999999, 2.39999999999986,
-3.2999999999997, -0.300000000000007, 1.40000000000001, 7.4,
8.3999999999999, -0.0]d path with load 27
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
[ 0 9 7 9 10 8 10 11 0 0 0
                                  0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 9, 7, 9, 10, 8, 10, 11) with negative reduced costath
is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
```

```
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER C: Capacity is 30
PRICER_C: Found path with load 12
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRI
Added (0, 9, 7, 9, 10, 8, 10, 11) with path weight 32
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 2 occurences of node 9
There are 2 occurences of node 10
Dual variables are [1.09999999999999, -3.89999999999996,
-3.89999999999986, -0.59999999999999, 2.3999999999986,
-3.2999999999997, -0.300000000000007, 0.7000000000000028, 7.4,
8.3999999999999, -0.0]
CER_C: Found path with load 14
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 10 with loa[ 0 9 7 9 10 4 10 11 0 0 0 0 0
0 0 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]d6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at nod
Labelling found path (0, 9, 7, 9, 10, 4, 10, 11) with negative reduced cost
Added (0, 9, 7, 9, 10, 4, 10, 11) with path weight 30
e 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path iThere are 1 occurences of node 4
There are 1 occurences of node 7
There are 2 occurences of node 9
There are 2 occurences of node 10
Dual variables are [1.79999999999972, -3.1999999999993, -4.599999999999,
-0.59999999999999, 2.3999999999986, -2.599999999999, -1.0,
1.400000000000001, 7.4, 8.399999999999, -0.0]
s currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER C: Found path with load 16
Path is currently at node 10 with load 6
PRICER C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER [ 0 9 1 9 5 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
C: Found path with load 17
```

```
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 14
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load Labelling found path (0, 9, 1, 9, 5, 9,
11) with negative reduced cost
Added (0, 9, 1, 9, 5, 9, 11) with path weight 25
There are 1 occurences of node 1
There are 1 occurences of node 5
There are 3 occurences of node 9
Dual variables are [1.79999999999972, -3.1999999999993, -4.599999999999,
8.3999999999999, -0.0]
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
```

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 6 wit[ 0 2 10 6 10 9 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 2, 10, 6, 10, 9, 11) with negative reduced cost
Added (0, 2, 10, 6, 10, 9, 11) with path weight 18
h load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: FounThere are 1 occurences of node 2
There are 1 occurences of node 6
There are 1 occurences of node 9
There are 2 occurences of node 10
Dual variables are [1.800000000000007, -3.399999999999986, -4.40000000000002,
-0.600000000000014, 1.000000000000036, -2.80000000000007,
```

```
-0.9999999999994, 1.39999999999986, 7.399999999999, 8.4, -0.0]
d path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
```

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
0 0
  0 0 0 0 0 0 0 0 0 0 0 0
und path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently aLabelling found path (0, 9, 1, 9, 10, 11) with negative
reduced cost
Added (0, 9, 1, 9, 10, 11) with path weight 24
There are 1 occurences of node 1
There are 2 occurences of node 9
There are 1 occurences of node 10
Dual variables are [0.800000000000025, -3.39999999999986, -4.40000000000002,
-0.600000000000014, 2.00000000000018, -2.80000000000007,
-0.9999999999994, 1.39999999999986, 7.399999999999, 8.4, -0.0]
t node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
```

```
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is curren[ 0 10 3 10 8 10 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
```

```
0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 10, 3, 10, 8, 10, 11) with negative reduced cost
Added (0, 10, 3, 10, 8, 10, 11) with path weight 22
There are 1 occurences of node 3
There are 1 occurences of node 8
There are 3 occurences of node 10
Dual variables are [0.800000000000025, -3.39999999999986, -4.40000000000002,
-0.600000000000014, 2.00000000000018, -2.80000000000007,
-0.9999999999964, 1.1999999999993, 7.39999999999, 8.4, -0.0]
tly at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Labelling found path (0, 10, 3, 10, 9, 10, 11) with negative reduced cost
Added (0, 10, 3, 10, 9, 10, 11) with path weight 28
There are 1 occurences of node 3
There are 1 occurences of node 9
There are 3 occurences of node 10
Dual variables are [0.800000000000000, -3.2000000000003, -4.5999999999999,
-0.59999999999999, 1.99999999999964, -2.99999999999947, -1.0,
1.39999999999986, 7.4, 8.399999999999, -0.0]
is currently at node 1 with load 10
PRICER_C: Found path with load 28
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 2[ 0 10 3 10 9 10 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 10, 3, 10, 9, 10, 11) with negative reduced cost6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 16
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 17
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 12
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
```

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Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is
Path already in variables with reduced cost -0.0 with farkas False.
Dual variables are [9.68421052631579, -6.631578947368421, 9.0,
8.684210526315788, -7.263157894736841, -3.99999999999982, 2.4210526315789473,
5.894736842105264, 3.631578947368421, 0.7894736842105263, -0.0]
currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Pat[ 0 8 1 8 1 11 0 0 0
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                               0
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h is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
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Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at nodeLabelling found path (0, 8, 1, 8, 1, 11) with negative
reduced cost
Added (0, 8, 1, 8, 1, 11) with path weight 23
There are 2 occurences of node 1
There are 2 occurences of node 8
Dual variables are [5.375000000000001, -3.375000000000027, 8.25000000000007,
6.5, -1.00000000000000009, -0.37499999999911, 1.5000000000000036,
6.12499999999999, 5.3749999999998, 1.99999999999999, -0.0]
9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

```
Path is currently at node 9 with load 5
Path is curr[ 0 3 10 3 10 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load
Labelling found path (0, 3, 10, 3, 10, 7, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 19
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with
load 23
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is cThere are no paths with negative reduced costs
Dual variables are [9.68421052631579, -6.631578947368421, 9.0,
8.684210526315788, -7.263157894736841, -3.99999999999982, 2.4210526315789473,
5.894736842105264, 3.631578947368421, 0.7894736842105263, -0.0]
urrently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
```

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Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 12
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with loa[ 0 8 1 8 1 11 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]d5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
```

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Path is currently at node 9 with load 5
Path is currently a
t node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path iLabelling found path (0, 8, 1, 8, 1, 11) with negative reduced cost
Path already in variables with reduced cost -8.157894736842106 with farkas
False.
There are no paths with negative reduced costs
Dual variables are [9.421052631578947, -7.6842105263157885, 9.0,
7.421052631578949, -5.736842105263159, -3.2631578947368425, 2.9473684210526314,
5.894736842105263, 4.421052631578947, 0.2631578947368421, -0.0]
s currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
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PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Capacity is 30
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
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Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 wit[ 0 3 1 8 7 9 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]h load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
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Labelling found path (0, 3, 1, 8, 7, 9, 11) with negative reduced cost Path already in variables with reduced cost -8.684210526315788 with farkas False. Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0] There are no paths with negative reduced costs Dual variables are [9.83333333333334, -9.3333333333333334, 9.0, 5.2222222222221, -4.5, -1.88888888888893, 3.2222222222222, 6.444444444445, 4.83333333333334, -1.111111111111111, -0.0] ntly at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29

Path is curre

Path is currently at node 9 with load 5

Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7

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Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
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PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
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Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path[ 0 8 1 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] is currently at node 10 with
load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
```

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Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3
Labelling found path (0, 8, 1, 8, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -7.777777777779 with farkas
False.
Dual variables are [4.821428571428571, -4.285714285714285, -1.4999999999999991,
2.50000000000001, 2.0357142857142856, 0.7857142857142856, 4.714285714285714,
5.714285714285714, 3.5357142857142856, 5.928571428571428, -0.0]
with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
```

```
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 16
Path is currently [ 0 1 8 7 10 7 9 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] at node 9 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
```

```
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICE
Labelling found path (0, 1, 8, 7, 10, 7, 9, 11) with negative reduced cost
Added (0, 1, 8, 7, 10, 7, 9, 11) with path weight 26
There are 1 occurences of node 1
There are 2 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
There are 1 occurences of node 10
5.93333333333333, 5.0, 5.600000000000000, -0.0]
R_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
```

```
Path is currently at node 10 wi[ 0 9 7 8 10 8 10 11 0 0 0 0 0 0 0
0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]th load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Labelling found path (0, 9, 7, 8, 10, 8, 10, 11) with negative reduced cost
Added (0, 9, 7, 8, 10, 8, 10, 11) with path weight 30
There are 1 occurences of node 7
There are 2 occurences of node 8
There are 1 occurences of node 9
There are 2 occurences of node 10
Dual variables are [4.090909090909, -2.45454545454533, -0.31818181818201,
3.68181818181818, 1.0454545454545467, 1.6818181818181799, 3.0,
5.545454545454547, 4.81818181818175, 5.545454545454547, -0.0]
ntly at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with [ 0 1 8 7 9 7 10 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]load 5
Path is currently at node 10 with load 6
PRICER C: Capacity is 30
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 16
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is
Labelling found path (0, 1, 8, 7, 9, 7, 10, 11) with negative reduced cost
Added (0, 1, 8, 7, 9, 7, 10, 11) with path weight 25
There are 1 occurences of node 1
```

```
There are 2 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [3.625, -2.25, -0.34375, 3.65625, 1.0625, 1.65625, 2.5,
5.5625, 5.25, 5.5625, -0.0]
currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with 1[ 0 1 8 7 9 7 9 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 1, 8, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -0.6875 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -0.5, 0.0, 0.0, 0.0, 0.0]
There are no paths with negative reduced costsoad 7
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 18
```

```
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 17
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 6 with lo
Dual variables are [4.09090909090909, -2.4545454545454533, -0.3181818181818201,
3.681818181818, 1.0454545454545467, 1.6818181818181799, 3.0,
5.545454545454547, 4.81818181818175, 5.545454545454547, -0.0]
    1 8 7 9 7 10 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
       0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 1, 8, 7, 9, 7, 10, 11) with negative reduced cost
Path already in variables with reduced cost -1.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, -0.5, 0.0, 0.0, 0.0, 0.0] ad 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
```

```
Path is currently at node 10 with load 6
PRICER_C: Found pat
There are no paths with negative reduced costs
Dual variables are [5.427631578947369, -4.513157894736843, -0.35526315789473717,
4.4407894736842115, 0.5394736842105257, 2.4407894736842115, 4.552631578947368,
5.835526315789474, 3.697368421052632, 5.039473684210526, -0.0]
h with load 24
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
```

Path is currently at node 10 with load 6

PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6

Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 18 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30

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Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 PRICER C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Capacity is 30 PRICER_C: Found path with load 30

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Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node[ 0 1 8 7 8 7 10 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
```

```
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node
9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at noLabelling found path (0, 1, 8, 7, 8, 7, 10, 11) with
negative reduced cost
Path already in variables with reduced cost -4.243421052631579 with farkas
False.
with load 5
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
There are no paths with negative reduced costs
Dual variables are [4.821428571428574, -4.285714285714295, -1.499999999999876,
2.50000000000124, 2.035714285714276, 0.7857142857142971, 4.714285714285714,
5.714285714285717, 3.5357142857142856, 5.9285714285714235, -0.0]
PRICER_C: Capacity is 30
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
```

```
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load[ 0 1 8 7 10 7 9 11 0 0 0 0 0
  0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0
                                  0 0 0 0 0] 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
PRICER_C: Capa
Labelling found path (0, 1, 8, 7, 10, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -3.4285714285714306 with farkas
False.
7.333333333333333, -1.0, 17.0, -9.0, -11.0, -6.66666666666666, -0.0]
city is 30
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is current[0 7 5 7 5 7 5 7 5 7 11 0 0 0 0 0 0 0 0 0
0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 7, 5, 7, 5, 7, 5, 7, 11) with negative reduced
Added (0, 7, 5, 7, 5, 7, 5, 7, 11) with path weight 97
There are 4 occurences of node 5
There are 5 occurences of node 7
Dual variables are [-2.25, -15.25, -3.0, -3.0, 3.0, -1.0, 17.0, -9.0, -11.0,
-4.5, -0.0
ly at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
```

Path is currently at node 1 with load 10 PRICER_C: Capacity is 30 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 9 with load 5 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Capacity is 30 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5

Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Capacity is 30 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Capacity is 30 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7

PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER C: Found path with load 13 Path is currently at node 3 with load 7 PRICER C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6

```
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
0 0 0 0
                                 0 0 0 0] at node 1 with load 10
  0 0 0 0 0 0 0 0 0 0
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER
_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
PatLabelling found path (0, 7, 1, 7, 10, 7, 10, 7, 11) with negative reduced
Added (0, 7, 1, 7, 10, 7, 10, 7, 11) with path weight 41h is currently at node 3
with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
```

```
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with
There are 1 occurences of node 1
There are 4 occurences of node 7
There are 2 occurences of node 10
Dual variables are [-1.0, -13.0, -3.0, -3.0, 3.0, -1.0, 17.0, -9.0, -11.0,
-13.0, -0.0]
load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node[ 0 7 1 7 1 7 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 7, 1, 7, 1, 7, 11) with negative reduced cost
Added (0, 7, 1, 7, 1, 7, 11) with path weight 33
There are 2 occurences of node 1
There are 3 occurences of node 7
Dual variables are [-9.0, -13.0, -3.0, -3.0, 3.0, -1.0, 17.0, -9.0, -11.0, -9.0,
-0.0
There are no paths with negative reduced costs
Dual variables are [9.516129032258064, -10.161290322580644, 3.8064516129032278,
3.70967741935484, -4.451612903225805, -1.193548387096775, 1.7096774193548387,
7.96774193548387, 5.967741935483871, 2.548387096774194, -0.0] 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 4 with loa
d 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 19
Path is currently at node 3 with load 7
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 8, 7, 8, 1, 8, 11) with negative reduced cost
Added (0, 8, 7, 8, 1, 8, 11) with path weight 25
is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
```

```
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
There are 1 occurences of node 1
There are 1 occurences of node 7
There are 3 occurences of node 8
Dual variables are [6.68, -4.8266666666665, -3.066666666666638,
0.933333333333362, 1.173333333333347, 0.10000000000142, 2.5200000000000005,
5.26666666666667, 5.3599999999999, 6.6, -0.0]
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently a[ 0 1 8 10 7 10 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]t node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Capacity is 30
PRICER C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 13
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 4 with lo
Labelling found path (0, 1, 8, 10, 7, 10, 11) with negative reduced cost
Added (0, 1, 8, 10, 7, 10, 11) with path weight 23
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
PatThere are 1 occurences of node 1
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 2 occurences of node 10
Dual variables are [8.64, -6.1799999999999, 4.7199999999999,
2.77999999999999, -0.979999999999999, 0.8000000000007, 1.960000000000002,
4.799999999999, 5.7799999999999, 3.8, -0.0]h is currently at node 1 with
load 10
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
```

```
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path
is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with lo[ 0 1 9 7 9 7 9 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0
    Labelling found path (0, 1, 9, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -5.89999999999999999 with farkas
False.
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
```

```
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with There are no paths with negative reduced costs
Dual variables are [6.680000000000001, -4.8266666666665, -3.0666666666666664,
0.933333333333336, 1.173333333333356, 0.09999999999964, 2.520000000000005,
5.26666666666666, 5.3599999999999, 6.600000000000000, -0.0]
load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
```

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Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
```

```
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 1[ 0 1 8 10 7 10 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]0 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with
Labelling found path (0, 1, 8, 10, 7, 10, 11) with negative reduced cost
Path already in variables with reduced cost -4.6666666666666 with farkas
False.
Dual variables are [11.80952380952381, -8.047619047619047, 10.904761904761905,
4.619047619047617, -4.380952380952383, -4.285714285, 1.4761904761904758,
3.9047619047619033, 5.857142857142858, -1.571428571428573, -0.0]
load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Pat[ 0 3 1 9 7 9 11 0 0 0
                                  0
                                     0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]h is currently at node 4 with
load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER C: Found path with load 17
Labelling found path (0, 3, 1, 9, 7, 9, 11) with negative reduced cost
Added (0, 3, 1, 9, 7, 9, 11) with path weight 23
There are 1 occurences of node 1
There are 1 occurences of node 3
There are 1 occurences of node 7
There are 2 occurences of node 9
Dual variables are [14.0, -4.465116279069768, 10.720930232558139,
-1.7674418604651159, 0.3720930232558137, 0.1395348837209296,
-2.1860465116279073, 4.395348837209302, 0.23255813953488413, 1.3720930232558146,
-0.0]
is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
PRICER C: Found path with load 15
Path is currently at node 9 with load 5
PRICER C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
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Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5

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Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
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Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 wit[ 0 3 10 1 9 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 3, 10, 1, 9, 11) with negative reduced cost
Path already in variables with reduced cost -8.325581395348838 with farkas
False.
There are no paths with negative reduced costs
Dual variables are [11.80952380952381, -8.047619047619047, 10.904761904761905,
4.619047619047617, -4.380952380952383, -4.285714285, 1.4761904761904758,
3.9047619047619033, 5.857142857142858, -1.571428571428573, -0.0
h load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Capacity is 30
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
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PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
```

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Capacity is 30
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load[ 0 3 1 9 7 9 11 0 0 0 0 0 0
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0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at n
Labelling found path (0, 3, 1, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -12.904761904761905 with farkas
False.
ode 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
```

```
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node There are no paths with negative reduced costs
Dual variables are [14.0, -8.95833333333334, 28.70833333333333,
6.062500000000002, -17.25000000000004, -11.833333333333336,
-12.7499999999996, 7.91666666666664, 9.4166666666668, -11.333333333333333,
-0.0]
1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
```

```
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
```

```
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
```

Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 3, 9, 3, 10, 11) with negative reduced cost
Added (0, 3, 9, 3, 10, 11) with path weight 31
currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
PRICER_C: Capacity is 30
PRICER_C: Found path with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path There are 2 occurences of node 3
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [14.0, -8.05208333333332, 14.4166666666666664,
9.12500000000004, -9.95833333333336, -10.84375000000004, -0.5,
3.83333333333333, 5.71874999999999, -3.5520833333333286, -0.0]
with load 19
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
```

Path is currently at node 7 with load 2

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 14
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 14
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
```

```
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at [ 0 9 1 3 10 11 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
                                        0 0 0] node 7 with load 2
    0 0 0 0 0 0 0 0 0
                                  0
                                     0
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 5 with load
Labelling found path (0, 9, 1, 3, 10, 11) with negative reduced cost
Added (0, 9, 1, 3, 10, 11) with path weight 19
There are 1 occurences of node 1
There are 1 occurences of node 3
There are 1 occurences of node 9
There are 1 occurences of node 10
Dual variables are [7.68421052631579, -4.543859649122805, 8.789473684210527,
8.86842105263158, -3.6754385964912304, -1.3421052631578965, 4.947368421052631,
4.122807017543859, 2.7894736842105257, -0.2631578947368428, -0.0]
5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 18
```

```
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 wit[ 0 3 4 1 8 7 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]h load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path
Labelling found path (0, 3, 4, 1, 8, 7, 11) with negative reduced cost
Added (0, 3, 4, 1, 8, 7, 11) with path weight 31
There are 1 occurences of node 1
```

```
There are 1 occurences of node 3
There are 1 occurences of node 4
There are 1 occurences of node 7
There are 1 occurences of node 8
Dual variables are [7.68421052631579, -4.543859649122806, 8.789473684210527,
5.456140350877193, -0.2631578947368425, 2.0701754385964897, 4.947368421052631,
4.122807017543859, 2.7894736842105265, -0.2631578947368422, -0.0]
is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
```

```
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with[ 0 3 1 8 7 9 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
load 16
Path is currently at node 10 with load 6
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 wiLabelling found path (0, 3, 1, 8, 7, 9, 11) with
negative reduced cost
Path already in variables with reduced cost -5.3333333333333 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]
```

```
There are no paths with negative reduced costs
Dual variables are [8.647058823529411, -7.1764705882352935, 9.352941176470587,
2.529411764705884, -1.7058823529411757, 3.7647058823529402, 4.882352941176471,
5.588235294117647, 3.0588235294117654, -2.0588235294117636, -0.0]
th load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
```

Path is currently at node 8 with load 5 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5

```
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently a[ 0 3 7 8 1 6 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
    0 0 0 0 0 0 0 0 0
                                  0 0
                                        0 0 0]t node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is current
Labelling found path (0, 3, 7, 8, 1, 6, 11) with negative reduced cost
Added (0, 3, 7, 8, 1, 6, 11) with path weight 27
There are 1 occurences of node 1
There are 1 occurences of node 3
There are 1 occurences of node 6
There are 1 occurences of node 7
There are 1 occurences of node 8
Dual variables are [8.647058823529413, -7.176470588235295, 9.35294117647059,
2.529411764705878, -1.7058823529411793, -1.4705882352941222, 4.88235294117647,
5.588235294117648, 3.0588235294117636, -2.0588235294117663, -0.0]
ly at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Capacity is 30
PRICER C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Pat[0 3 1 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]h is currently at node 8 with
load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 2
Labelling found path (0, 3, 1, 8, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -8.529411764705884 with farkas
False.
Dual variables are [3.375, -5.25, 8.5, 8.375, -1.5625, -0.0, 6.0, 4.75, 2.25,
-1.75, -0.0]6
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
```

PRICER_C: Found path with load 7 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is current ly at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 19 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5

Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10

```
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with lo[ 0 3 7 8 7 8 7 8 7 11 0 0 0 0
0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 3, 7, 8, 7, 8, 7, 8, 7, 11) with negative reduced cost
Added (0, 3, 7, 8, 7, 8, 7, 8, 7, 11) with path weight 46
There are 1 occurences of node 3
There are 4 occurences of node 7
There are 3 occurences of node 8
Dual variables are [3.75, -5.25, 7.75, 8.75, -2.25, -0.375, 6.0, 4.75, 2.25,
-0.75, -0.0] ad 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Capacity is 30 PRICER_C: Found path with load 7 PRICER C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path wit h load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 5 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24

Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10

```
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is current[ 0 4 5 4 9 7 8 11 0
                                          0 0 0 0 0 0 0 0
0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0
                                        0 0 0]ly at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
```

```
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
Labelling found path (0, 4, 5, 4, 9, 7, 8, 11) with negative reduced cost
Added (0, 4, 5, 4, 9, 7, 8, 11) with path weight 26
There are 2 occurences of node 4
There are 1 occurences of node 5
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [3.75, -5.25, 7.75, 8.75, -4.5, -0.375, 6.0, 4.75, 2.25,
-0.75, -0.0
PRICER C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
```

PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 19 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30

```
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with[ 0 4 6 4 9 7 8 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at
Labelling found path (0, 4, 6, 4, 9, 7, 8, 11) with negative reduced cost
Added (0, 4, 6, 4, 9, 7, 8, 11) with path weight 28
node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: There are 2 occurences of node 4
There are 1 occurences of node 6
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [5.875, -5.25, 7.75, 6.625, -0.25, 1.75, 6.0, 4.75, 2.25,
-0.75, -0.0
Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER C: Found path with load 7
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
PRICER_C: Found path with load 13
Path is currently at node 4 with load 6
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 12
Path is currently at node 9 with load 5
PRICER_C: Found path with load 13
Path is currently at node 10 with load 6
PRICER C: Found path with load 15
Path is currently at node 1 with load 10
PRICER C: Found path with load 15
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is curren[ 0 3 7 8 7 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0
0 0
                  \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \ \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 
tly at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
```

```
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
PRICER C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 8 with load 5
Path is currently at node 4Labelling found path (0, 3, 7, 8, 7, 8, 7, 9, 11)
with negative reduced cost
Added (0, 3, 7, 8, 7, 8, 7, 9, 11) with path weight 36
There are 1 occurences of node 3
There are 3 occurences of node 7
There are 2 occurences of node 8
There are 1 occurences of node 9
Dual variables are [6.375, -5.25, 6.25, 7.125, -1.25, 0.75, 6.0, 4.75, 2.25,
-0.375, -0.0
with load 6
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
```

```
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 7 with[ 0 1 8 7 8 7 10 11 0 0 0 0 0 0 0
0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 1, 8, 7, 8, 7, 10, 11) with negative reduced cost
Path already in variables with reduced cost -0.5 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]
There are no paths with negative reduced costs load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
```

```
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is current
Dual variables are [4.5, -6.75, 4.25, 8.0, -2.0, -0.0, 8.0, 3.25, 0.25, -0.0,
ly at node 3 with load 7
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
```

```
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
```

```
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
```

```
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 3 with 1[ 0 7 8 7 8 7 8 7 11 0 0 0 0
0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 7, 8, 7, 8, 7, 8, 7, 11) with negative reduced
cost
Path already in variables with reduced cost -4.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]
There are no paths with negative reduced costs
Dual variables are [-9.0, -15.75, -11.5, -3.0, 3.0, -1.0, 17.0, -3.5, -11.0,
-9.0, -0.0]
oad 7
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 16
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
```

PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER C: Found path with load 12 Path is currently at node 9 with load 5 PRICER C: Found path with load 16 Path is currently at node 1 with load 10 PRICER_C: Found path with load 13 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 PRICER C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5

PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 19 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7

```
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is curre[ 0 7 8 7 8 7 8 7 8 7 11 0 0 0 0 0 0 0 0 0
0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 7, 8, 7, 8, 7, 8, 7, 11) with negative reduced
Path already in variables with reduced cost -22.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]
There are no paths with negative reduced costsntly at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
```

```
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRI
Dual variables are [-9.0, -63.0, -61.0, -16.0, -11.0, -1.0, 17.0, 13.0, -14.0,
-15.5, -0.0
CER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
```

Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 27 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 13 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7

```
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently[ 0 7 8 7 8 7 8 7 8 7 11 0 0 0 0 0 0 0 0 0
0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Labelling found path (0, 7, 8, 7, 8, 7, 8, 7, 11) with negative reduced
cost
Path already in variables with reduced cost -88.0 with farkas False.
Dual variables are [14.0, -10.25000000000004, 16.12499999999996,
-5.6250000000000000, -7.0, -9.62500000000000, -0.749999999999964,
is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
```

```
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently a[ 0 8 1 3 10 11 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 8, 1, 3, 10, 11) with negative reduced cost
Added (0, 8, 1, 3, 10, 11) with path weight 19
There are 1 occurences of node 1
There are 1 occurences of node 3
There are 1 occurences of node 8
There are 1 occurences of node 10
Dual variables are [10.5, -10.0, 7.25, 3.0, -4.0, -1.0, 4.0, 6.25, 4.25, -5.0,
-0.07
t node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
```

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 10 with 1[ 0 8 1 8 7 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 8, 1, 8, 7, 11) with negative reduced cost
Added (0, 8, 1, 8, 7, 11) with path weight 25
oad 6
```

```
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currentlyThere are 1 occurences of node 1
There are 1 occurences of node 7
There are 2 occurences of node 8
Dual variables are [9.0555555555555557, -7.8888888888889, 7.0277777777778,
4.55555555555555, -2.19444444444441, 0.55555555555555518, 4.77777777777778,
5.58333333333333, 3.47222222222223, -2.666666666666666, -0.0]
at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 7
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
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Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 16 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30

```
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with lo[ 0 1 8 7 8 7 9 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 1, 8, 7, 8, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -7.25 with farkas False.
There are no paths with negative reduced costs
Dual variables are [7.710526315789473, -5.7368421052631575, 7.894736842105262,
5.394736842105262, -0.5526315789473664, 1.631578947368423, 5.315789473684211,
```

```
4.447368421052632, 3.263157894736842, -1.0526315789473664, -0.0]ad 24
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently
at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
```

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Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
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Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at [ 0 3 1 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0
                                        0 0 0] node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
```

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PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
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Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
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Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
```

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Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
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Path is currently at node 4 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 19 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7

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Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with loa
d 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
```

```
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently Labelling found path (0, 3, 1, 8, 7, 9, 11) with negative
reduced cost
Path already in variables with reduced cost -5.631578947368418 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0] at
node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with
load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
```

```
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
PathThere are no paths with negative reduced costs
Dual variables are [7.65625, -6.0625, 8.4375, 4.4375, -0.0625, 0.4375, 5.75,
4.71875, 2.9375, -1.8125, -0.0]
is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
```

```
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 14
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 14
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at nod[ 0 3 1 8 7 9 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
       0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 3, 1, 8, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -6.5 with farkas False.
There are no paths with negative reduced costs
Dual variables are [10.5, -8.5, 8.75, 2.0, -2.5, -0.0, 4.0, 3.75, 5.25, -4.0,
-0.07
e 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER C: Found path with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 12
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 14
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
```

```
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 6 with load [ 0 3 1 9 7 9 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
```

```
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is cuLabelling found path (0, 3, 1, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -10.75 with farkas False.
There are no paths with negative reduced costs
Dual variables are [6.60000000000001, -9.7000000000001, 9.3999999999999,
-5.80000000000001, -7.10000000000001, -2.60000000000014, 1.40000000000001,
8.2, 8.5, -5.19999999999999, -0.0
rrently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is curre[0 9 7 9 7 9 7 11 0 0 0 0 0 0 0 0 0 0 0
       0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] ntly at node 7 with load 2
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 wit
Labelling found path (0, 9, 7, 9, 7, 9, 7, 9, 7, 11) with negative reduced cost
Path already in variables with reduced cost -2.600000000000014 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER CThere are no paths with negative reduced costs
Dual variables are [6.307692307692307, -9.846153846153843, 9.448717948717949,
-6.384615384615387, -7.53846153846154, -2.7948717948717956, 1.2051282051282048,
8.589743589743588, 8.743589743589745, -5.346153846153843, -0.0]
: Capacity is 30
PRICER_C: Found path with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
PRICER C: Found path with load 12
Path is currently at node 8 with load 5
PRICER_C: Found path with load 12
Path is currently at node 9 with load 5
PRICER_C: Found path with load 15
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
```

Path is currently at node 9 with load 5 Path is currently at node 8 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 19 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 16 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27

```
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
```

Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 4 with load 6 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 5 with load 5 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 17 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30

Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER C: Found path with load 15 Path is currently at node 8 with load 5 PRICER C: Found path with load 15 Path is currently at node 9 with load 5 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 17

Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2

```
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is curre[ 0 9 7 9 7 9 7 11 0 0 0 0 0 0 0 0 0 0
                                    0 0 0 0]
    0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 9, 7, 9, 7, 9, 7, 11) with negative reduced cost
Path already in variables with reduced cost -2.7948717948717956 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]
ntly at node 1 with load 10
PRICER_C: Found path with load 30
```

```
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: FoThere are no paths with negative reduced costs
Dual variables are [6.33333333333336, -10.0, 9.333333333333336,
-6.33333333333329, -7.3333333333333333, -2.6666666666666, 1.3333333333333331,
8.66666666666666, 8.6666666666666, -5.333333333333375, -0.0]
und path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5

```
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICE[ 0 9 7 9 7 9 7 9 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 9, 7, 9, 7, 9, 7, 9, 7, 11) with negative reduced cost
Path already in variables with reduced cost -2.999999999999 with farkas
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]R_C:
Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
There are no paths with negative reduced costs
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
```

Path is currently at node 9 with load 5

```
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 1 with load 10
PathDual variables are [7.95833333333334, -10.9375, 7.895833333333333,
-3.0833333333333, -4.93750000000001, -0.4166666666666785, 3.58333333333333,
7.66666666666667, 6.72916666666667, -4.520833333333336, -0.0]
is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 wit[ 0 9 7 9 7 9 7 9 11 0 0 0 0 0 0
0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 9, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -8.66666666666671 with farkas
False.
h load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently atDual variables are [14.0, -28.0, 17.0, -7.0, -6.0, -6.0,
5.0, 13.0, 11.0, -9.0, -0.0]
node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
```

PRICER_C: Found path with load 15 Path is currently at node 8 with load 5 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 PRICER C: Found path with load 17 Path is currently at node 1 with load 10 PRICER C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 19 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is cu[ 0 8 7 8 7 8 7 8 7 11 0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 8, 7, 8, 7, 8, 7, 8, 7, 11) with negative reduced cost
Path already in variables with reduced cost 5.0 with farkas False.
Dual variables are [6.16, -2.11999999999974, 5.880000000000003,
4.28000000000002, 2.47999999999986, 4.179999999999, 4.8000000000001,
4.08, 2.079999999999993, 1.11999999999974, -0.0]
rrently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
```

```
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with[ 0 6 4 6 10 3 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 6, 4, 6, 10, 3, 11) with negative reduced cost
 load 22
Path is currently at node 1 with load 10
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currentlAdded (0, 6, 4, 6, 10, 3, 11) with path weight 15
There are 1 occurences of node 3
There are 1 occurences of node 4
There are 2 occurences of node 6
There are 1 occurences of node 10
Dual variables are [8.111111111111114, -0.88888888888877, 7.1111111111111114,
0.33333333333333, 5.11111111111111, 3.8333333333333, 3.2222222222222205,
3.222222222222225, 1.333333333333334, -0.1111111111111111427, -0.0]
y at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with[ 0 5 1 8 1 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0
                                       0 0 01 load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
```

```
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currentl
Labelling found path (0, 5, 1, 8, 1, 11) with negative reduced cost
Added (0, 5, 1, 8, 1, 11) with path weight 21
There are 2 occurences of node 1
There are 1 occurences of node 5
There are 1 occurences of node 8
Dual variables are [6.333333333333333, -0.888888888888886, 5.333333333333333,
0.33333333333333, 5.11111111111111, 3.83333333333335, 5.00000000000001,
3.222222222223, 1.33333333333333, 1.666666666666667, -0.0]
y at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 7
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
```

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path [ 0 5 1 8 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 5, 1, 8, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, -0.5, 0.0, 0.0, 0.0, 0.0, 0.0]
is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 12
Path is cuThere are no paths with negative reduced costs
Dual variables are [6.16, -2.11999999999974, 5.52000000000001,
4.28000000000002, 2.47999999999986, 4.179999999999, 4.8000000000001,
4.08, 2.0799999999999983, 1.479999999999986, -0.0]
rrently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
```

```
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with 1[ 0 \,6 \,4 \,6 \,10 \,3 \,11 \,0 \,0 \,0 \,0 \,0 \,0
0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]oad 5
Path is currently at node 8 with load 5
```

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Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at n
Labelling found path (0, 6, 4, 6, 10, 3, 11) with negative reduced cost
Path already in variables with reduced cost -4.64000000000001 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, -0.5, 0.0, 0.0, 0.0, 0.0, 0.0]
ode 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path isThere are no paths with negative reduced costs
Dual variables are [6.641025641025641, -0.4358974358974308, 5.641025641025641,
3.692307692307697, 2.8717948717948687, 5.846153846153847, 5.076923076923066,
3.7948717948717947, -0.07692307692308731, 1.3589743589743586, -0.0]
currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER C: Found path with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 wi[ 0 6 4 6 10 3 11 0 0 0 0 0 0 0 0
  0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0
                                        0 0 0]th load 5
                                  0
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 30
Path is currently at node 6 with load
Labelling found path (0, 6, 4, 6, 10, 3, 11) with negative reduced cost
Path already in variables with reduced cost -7.38461538461539 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, -0.5, 0.0, 0.0, 0.0, 0.0]5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1
There are no paths with negative reduced costs
Dual variables are [6.666666666666664, -0.5555555555555429, 5.666666666666664,
3.6666666666666714, 2.888888888888887, 5.8888888888888, 5.0,
3.777777777777786, 0.11111111111111110006, 1.3333333333333357, -0.0
with load 10
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
```

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PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
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Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
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Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 1 [ 0 6 4 6 10 3 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
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0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] with load 10
PRICER_C: Found path with load 12
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
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PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Foun
d path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with loadLabelling found path (0, 6, 4, 6, 10, 3,
11) with negative reduced cost
Path already in variables with reduced cost -7.4444444444443 with farkas
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at noThere are no paths with negative reduced costs
Dual variables are [5.666666666666667, -0.3333333333333334, 7.666666666666667,
4.999999999996, 2.000000000000027, 4.666666666666, 4.9999999999999,
3.999999999999956, 0.666666666666666714, 0.8333333333333333, -0.0]
de 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
```

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Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
PRICER_C: Capacity is 30
PRICER_C: Found path with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 12
Path is currently at node 7 with load 2
PRICER C: Found path with load 15
Path is currently at node 8 with load 5
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 8 with load 5
PRICER_C: Found path with load 12
Path is currently at node 9 with load 5
PRICER_C: Found path with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 7
Path is currently at node 9 with load 5
PRICER C: Found path with load 15
Path is currently at node 1 with load 10
PRICER_C: Found path with load 12
Path is currently at node 3 with load 7
PRICER_C: Found path with load 10
Path is currently at node 9 with load 5
PRI[ 0 6 4 6 10 3 11 0 0 0
                                                                                \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0 \  \, 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
CER_C: Found path with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: FounLabelling found path (0, 6, 4, 6, 10, 3, 11) with negative reduced
Path already in variables with reduced cost -7.83333333333333 with farkas
False.
There are no paths with negative reduced costs
Dual variables are [5.736842105263159, -0.2631578947368407, 7.736842105263159,
5.3157894736842115, 1.7894736842105257, 4.578947368421052, 4.789473684210525,
4.157894736842104, 0.5789473684210522, 0.7631578947368407, -0.0]
d path with load 22
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

PRICER_C: Found path with load 22 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 16 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 14 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 14 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 22 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 14 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 8 with load 5 PRICER C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 12 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 7 with load 2

```
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
```

```
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node[ 0 6 4 6 10 3 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0
                                  0
                                        0 0 0] 9 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

```
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 8 with load 5
Path is curren
tly at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 8 with load 5
```

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at noLabelling found path (0, 6, 4, 6, 10, 3, 11) with
negative reduced cost
Path already in variables with reduced cost -7.973684210526315 with farkas
There are no paths with negative reduced costs
Dual variables are [5.666666666666666, -0.0666666666666377, 7.9333333333333333,
5.4000000000004, 1.73333333333337, 4.466666666666, 4.73333333333333,
4.20000000000000, 0.46666666666659, 0.69999999999984, -0.0]
de 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently [ 0 6 4 6 10 3 11
                                        0 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
  0 0 0 0 0 0 0 0 0 0
                                        0 0 0]at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path i
Labelling found path (0, 6, 4, 6, 10, 3, 11) with negative reduced cost
Path already in variables with reduced cost -7.9666666666666 with farkas
False.
s currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
```

```
Path is currently at node 3 with load 7
PaThere are no paths with negative reduced costs
Dual variables are [5.578947368421052, -0.1578947368421062, 7.842105263157894,
5.368421052631582, 1.736842105263154, 4.526315789473685, 4.7368421052631575,
4.3157894736842115, 0.526315789473685, 0.7894736842105269, -0.0]
th is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
```

```
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
```

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node [ 0 6 4 6 4 7 8 11 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 6, 4, 6, 4, 7, 8, 11) with negative reduced cost
Added (0, 6, 4, 6, 4, 7, 8, 11) with path weight 27
There are 2 occurences of node 4
There are 2 occurences of node 6
There are 1 occurences of node 7
There are 1 occurences of node 8
Dual variables are [5.394366197183103, 0.16901408450704558, 8.169014084507046,
4.535211267605641, 2.3098591549295726, 4.492957746478867, 4.225352112676058,
4.718309859154926, 0.4929577464788668, 0.7183098591549255, -0.0]
8 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
```

Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5

```
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: [ 0 6 4 6 4 6 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0] Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path
Labelling found path (0, 6, 4, 6, 4, 6, 11) with negative reduced cost
Path already in variables with reduced cost -5.549295774647881 with farkas
False.
There are no paths with negative reduced costs is currently at node 5 with load
5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Capacity is 30
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
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Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with
Dual variables are [7.04000000000001, 0.59999999999999, 6.92,
4.36000000000001, 2.2399999999994, 5.24, 4.55999999999999,
3.239999999999999, -0.4399999999977, 1.800000000000007, -0.0
load 28
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Fou[ 0 6 10 3 1 7 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 6, 10, 3, 1, 7, 11) with negative reduced cost
Added (0, 6, 10, 3, 1, 7, 11) with path weight 25
There are 1 occurences of node 1
There are 1 occurences of node 3
There are 1 occurences of node 6
There are 1 occurences of node 7
There are 1 occurences of node 10
Dual variables are [6.5769230769230775, 0.9230769230769251, 7.038461538461538,
4.23076923076923, 2.4230769230769242, 5.153846153846153, 4.538461538461538,
3.6923076923076916, -0.7307692307692326, 1.6923076923076916, -0.0]
nd path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
```

```
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
```

Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5

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PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at n[ 0 6 4 6 10 3 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
    PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is curr
ently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
```

```
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
```

Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7

```
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with loadLabelling found path (0, 6, 4, 6, 10, 3,
11) with negative reduced cost
Path already in variables with reduced cost -8.269230769230766 with farkas
Dual variables are [8.0, -6.0, 9.0, 7.5, -0.0, 9.0, -12.0, -2.0, -6.5, -0.0,
-0.0] 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with 1
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
                                       1290
```

Path is currently at node 4 with load 6

Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5

PRICER_C: Found path with load 29

PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5

```
PRICER_C: Found path with load 26
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 1Labelling found path (0, 6, 4, 6, 4, 10,
11) with negative reduced cost
Added (0, 6, 4, 6, 4, 10, 11) with path weight 18
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at nodeThere are 2 occurences of node 4
There are 2 occurences of node 6
There are 1 occurences of node 10
Dual variables are [5.142857142857143, -10.142857142857142, 9.0,
1.1428571428571428, 4.571428571428571, 9.0, -2.2857142857142874,
6.142857142857144, -7.142857142857142, -2.2857142857142856, -0.0]
5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

PRICER_C: Capacity is 30

PRICER_C: There are no paths with negative reduced costs

PRICER_C: Capacity is 30

PRICER_C: Found path with load 17

Path is currently at node 3 with load 7

PRICER_C: Found path with load 15

Path is currently at node 3 with load 7

PRICER_C: Found path with load 23

Path is currently at node 10 with load 6

Path is currently at node 3 with load 7

PRICER_C: Found path with load 21

Path is currently at node 6 with load 5

Path is currently at node 4 with load 6

PRICER_C: Found path with load 25

Path is currently at node 3 with load 7

Path is currently at node 1 with load 10

PRICER_C: Found path with load 24

Path is currently at node 3 with load 7

Path is currently at node 1 with load 10

PRICER_C: Found path with load 22

Path is currently at node 8 with load 5

Path is currently at node 1 with load 10

PRICER_C: Found path with load 20

Path is currently at node 3 with load 7

Path is currently at node 10 with load 6

PRICER_C: Found path with load 18

Path is currently at node 6 with load 5

Path is currently at node 10 with load 6

PRICER_C: Found path with load 18

Path is currently at node 3 with load 7

Path is currently at node 4 with load 6

PRICER_C: Found path with load 16

Path is currently at node 6 with load 5

Path is currently at node 4 with load 6

PRICER_C: Found path with load 18

Path is currently at node 3 with load 7

Path is currently at node 10 with load 6

PRICER_C: Found path with load 28

Path is currently at node 6 with load 5

Path is currently at node 4 with load 6

Path is currently at node 3 with load 7

PRICER_C: Found path with load 30

Path is currently at node 3 with load 7

Path is currently at node 10 with load 6

Path is currently at node 3 with load 7

PRICER_C: Found path with load 28

Path is currently at node 6 with load 5

Path is currently at node 10 with load 6

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently a[ 0 6 5 6 5 6 5 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 6, 5, 6, 5, 6, 5, 11) with negative reduced cost
Added (0, 6, 5, 6, 5, 6, 5, 11) with path weight 32
There are 3 occurences of node 5
There are 3 occurences of node 6
Dual variables are [6.46666666666666, -4.33333333333333, 9.0,
2.4499999999993, 3.7, 6.966666666666, 0.2000000000000107,
4.366666666666666, 0.700000000000028, -0.833333333333333, -0.0]
```

t node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 29 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6

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Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER_C: [ 0 6 4 6 10 3 11 0
                                  0
                                             0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at no
Labelling found path (0, 6, 4, 6, 10, 3, 11) with negative reduced cost
Path already in variables with reduced cost -9.5499999999999 with farkas
There are no paths with negative reduced costsde 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at
Dual variables are [7.190476190476197, -4.3333333333333375, 9.0,
1.9642857142857135, 4.023809523809525, 6.642857142857144, 1.3809523809523725,
2.0238095238095184, 1.0238095238095184, 0.7857142857142856, -0.0]
node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
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Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] is currently at node 4 with
load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
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Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at n

Labelling found path (0, 6, 10, 3, 10, 8, 11) with negative reduced cost Path already in variables with reduced cost -1.2380952380952337 with farkas False. Farkas Values are [0.0, 0.0, 0.0, -0.5, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0] ode 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7

Path is currently at node 7 with load 2

Path is currently at node 8 with load 5

Path is currently at node 10 with load 6

PRICER_C: Found path with load 29

Path is currently at node 8 with load 5

Path is currently at node 1 with load 10

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PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
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Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
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PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7

Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 27 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 5 with load 5

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Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at nThere are no paths with negative reduced costs
Dual variables are [9.0, -5.0, 9.0, 6.5, 1.0, 9.0, -10.0, -1.0, -6.5, -0.0,
-0.0]
ode 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
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Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30

Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28

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Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 wi[ 0 6 4 6 4 10 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 6, 4, 6, 4, 10, 11) with negative reduced cost
Path already in variables with reduced cost -13.0 with farkas False.
There are no paths with negative reduced costs
Dual variables are [9.66666666666666, -4.33333333333333, 9.0,
-0.3333333333333334, -6.8333333333334, 0.6666666666666666, -0.0]
th load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
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Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 11 Path is currently at node 6 with load 5 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 22

Path is currently at node 3 with load 7 Path is currently at node 6 with load 5 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28

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Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
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Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
```

```
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 22
Path is curr[ 0 6 4 6 4 10 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
       0 0 0 0 0 0 0 0 0 0 0 0 0]
  0
Labelling found path (0, 6, 4, 6, 4, 10, 11) with negative reduced cost
Path already in variables with reduced cost -13.0 with farkas False.
Dual variables are [14.0, -2.0, 9.0, -6.0, 7.5, -8.0, -20.0, -23.0, -17.0, 12.0,
-0.01
ently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
```

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Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
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```
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
PRICER_C: Found path with load 10
```

Path is currently at node 6 with load 5 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 6 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 6 with load 5 PRICER C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6

PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 25 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 27 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5

```
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with 1[ 0 5 10 3 10 9 11 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 5, 10, 3, 10, 9, 11) with negative reduced cost
Added (0, 5, 10, 3, 10, 9, 11) with path weight 23
oad 10
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at There are 1 occurences of node 3
There are 1 occurences of node 5
There are 1 occurences of node 9
There are 2 occurences of node 10
Dual variables are [14.0, -2.0, 9.0, -6.0, 7.5, -8.0, -20.0, -23.0, -17.5, 12.0,
-0.07
node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 6[ 0 5 10 3 10 6 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
```

```
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 5, 10, 3, 10, 6, 11) with negative reduced cost
Path already in variables with reduced cost -14.5 with farkas False.
Dual variables are [-7.791666666666666, -32.66666666666664, 9.0, 20.0,
-9.208333333333334, 19.875, -69.625, -28.6666666666664, -16.16666666666664,
-6.58333333333334, -0.0]
with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
```

Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 15 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5

```
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at nod[ 0 6 4 6 4 10 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]e 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C:
Labelling found path (0, 6, 4, 6, 4, 10, 11) with negative reduced cost
```

Path already in variables with reduced cost -55.1666666666667 with farkas False. Dual variables are [6.386574074074076, 0.0347222222222321, 6.879629629629628, 3.423611111111116, 3.0509259259259256, 4.745370370369, 4.91666666666664, 4.071759259259261, 0.745370370370372, 1.6620370370370396, -0.0] Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29

Path is currently at node 6 with load 5

```
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
```

```
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 [ 0 6 10 3 10 6 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 6, 10, 3, 10, 6, 11) with negative reduced cost
Added (0, 6, 10, 3, 10, 6, 11) with path weight 15
There are 1 occurences of node 3
```

```
There are 2 occurences of node 6
There are 2 occurences of node 10
Dual variables are [6.098039215686273, 2.0588235294117645, 8.294117647058822,
5.588235294117646, 1.2745098039215694, 2.784313725490195, 4.2745098039215685,
4.0392156862745106, 0.29411764705882604, 0.5686274509803937, -0.0]
with load 5
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 6 with load 5
```

Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30

```
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
```

Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 6 with load 5 PRICER_C: Found path with load 11 Path is currently at node 6 with load 5 PRICER C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 6 with load 5 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 1 with load 10

```
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 16
Path is currently at node 6 with load 5
Path is cu[ 0 2 7 8 1 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
       0 0 0 0 0 0 0 0 0 0 0 0 0]
rrently at node 4 with load 6
PRICER_C: Found path with load 17
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is cLabelling found path (0, 2, 7, 8, 1, 9, 11) with negative reduced cost
Path already in variables with reduced cost -1.764705882352942 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0,
0.0]urrently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
RICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
```

Path is currently at node 4 with load 6

```
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6There are no paths with negative reduced
Dual variables are [6.386574074074076, 0.0347222222222321, 6.879629629629628,
3.4236111111111116, 3.0509259259259256, 4.745370370370369, 4.9166666666666666,
4.071759259259261, 0.745370370370372, 1.6620370370370396, -0.0]
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
```

```
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
```

```
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 6 with load 5
PRICER_C: Found path with load 11
```

Path is currently at node 6 with load 5 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 PRICER_C: Found path with load 22 Path is currently at node 3 with load 7 Path is currently at node 6 with load 5 PRICER_C: Found path with load 21 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 20

```
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 20
Path is currently at n[ 0 6 10 3 10 6 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] ode 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 18
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 17
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path wit
Labelling found path (0, 6, 10, 3, 10, 6, 11) with negative reduced cost
Path already in variables with reduced cost -4.6944444444446 with farkas
False.
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at nod
There are no paths with negative reduced costs
Dual variables are [6.069400630914826, 0.3785488958990566, 7.5299684542586744,
3.7034700315457396, 2.86435331230284, 4.526813880126184, 5.0126182965299675,
3.8611987381703474, 0.5268138801261815, 1.5394321766561523, -0.0
e 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
```

```
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is curre[ 0 6 4 5 4 6 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 6, 4, 5, 4, 6, 11) with negative reduced cost
Added (0, 6, 4, 5, 4, 6, 11) with path weight 15
There are 2 occurences of node 4
There are 1 occurences of node 5
There are 2 occurences of node 6
Dual variables are [5.810810810810809, 1.3783783783783807, 7.162162162162167,
1.5945945945956, 3.2702702702702697, 4.270270270270269, 4.162162162162163,
4.378378378378377, 1.4864864864864842, 1.648648648648647, -0.0]
ntly at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 1 with loa[ 0 6 10 3 10 6 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0
                                        0 0 0]d 10
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 w
ith load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
Path is currently at nodLabelling found path (0, 6, 10, 3, 10, 6, 11) with
negative reduced cost
Path already in variables with reduced cost -4.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0]
e 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currThere are no paths with negative reduced costs
Dual variables are [5.105263157894738, 1.1052631578947367, 7.1052631578947345,
2.7894736842105257, 2.4736842105263155, 3.473684210526317, 4.315789473684211,
4.315789473684211, 2.1578947368421053, 2.473684210526317, -0.0]
[ 0 6 10 3 10 6 11 0 0 0 0
                                  0 0 0 0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0
                                  0
                                     0
                                        0 0 01
ently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
```

Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 5 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 PRICER C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 11 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 1 with load 10Labelling found path (0, 6, 10, 3, 10, 6, 11) with negative reduced cost Path already in variables with reduced cost -4.0 with farkas False. Farkas Values are [0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0] PRICER C: Found path with load 13 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24

Path is currently at node 2 with load 8 Path is currently at node 10 with load 6

PRICEThere are no paths with negative reduced costs

Dual variables are [5.655172413793102, 0.8275862068965552, 8.379310344827585, 4.06896551724138, 2.6206896551724133, 4.2413793103448265, 5.137931034482757, 3.5862068965517246, 0.24137931034482918, 1.3793103448275887, -0.0] R_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 21 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 21 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 19 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7

PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 29 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6

```
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 1 w[ 0 6 4 5 4 6 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0]ith load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
PRICER_C: Foun
Labelling found path (0, 6, 4, 5, 4, 6, 11) with negative reduced cost
Path already in variables with reduced cost -4.241379310344826 with farkas
False.
with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
```

```
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 28
Path is currently at node 4 with load 6
Path
There are no paths with negative reduced costs
Dual variables are [5.488372093023253, 0.4186046511627861, 8.023255813953487,
3.674418604651157, 2.883720930232562, 4.395348837209308, 5.232558139534886,
3.6279069767441854, 0.6279069767441889, 1.8604651162790684, -0.0
 is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

PRICER_C: Found path with load 25 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER C: Found path with load 15 Path is currently at node 5 with load 5 PRICER_C: Found path with load 16 Path is currently at node 10 with load 6 PRICER_C: Found path with load 14 Path is currently at node 10 with load 6 PRICER_C: Found path with load 17 Path is currently at node 1 with load 10 PRICER_C: Found path with load 13 Path is currently at node 10 with load 6 PRICER_C: Found path with load 15 Path is currently at node 1 with load 10 PRICER_C: Found path with load 11

Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 1 with load 10 PRICER_C: Found path with load 13 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 2 with load 8 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 23

```
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently[ 0 6 10 3 10 6 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 6, 10, 3, 10, 6, 11) with negative reduced cost
Path already in variables with reduced cost -5.534883720930239 with farkas
False.
Dual variables are [3.7692307692307683, -0.23076923076923045, 7.423076923076923,
2.9230769230769225, 3.384615384615385, 5.23076923076923, 6.384615384615384,
2.6923076923076925, 0.6923076923076927, 1.6923076923076952, -0.0] at node 10
with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C
```

: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 25 Path is currently at node 5 with load 5 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 5 with load 5 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 2 with load 8 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 28 Path is currently at node 4 with load 6 Path is currently at node 10 with load 6 Path is currently at node 1 with load 10

```
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 3[ 0 6 10 3 10 7 11 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]0
Path is currently at node 4 with load 6
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 5
PRICER_C: Found path with load 13
Path is currently at node 4 with load 6
PRICER C: Found path with load 13
Path is currently at node 3 with load 7
PRICER_C: Found path with load 11
Path is currently at node 6 with load 5
PRICER_C: Found path with load 12
Path is currently at node 3 with load 7
PRICER_C: Found path with load 11
Path is currently at node 4 with load 6
PRICER_C: Found
Labelling found path (0, 6, 10, 3, 10, 7, 11) with negative reduced cost
Added (0, 6, 10, 3, 10, 7, 11) with path weight 22
There are 1 occurences of node 3
There are 1 occurences of node 6
There are 1 occurences of node 7
There are 2 occurences of node 10
Dual variables are [3.7692307692307665, -0.23076923076923095, 7.564102564102566,
2.923076923076925, 3.3846153846153832, 5.230769230769232, 6.384615384615385,
2.6923076923076916, 0.6923076923076921, 1.4102564102564097, -0.0]
path with load 11
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
PRICER_C: Found path with load 17
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
PRICER_C: Found path with load 16
Path is currently at node 9 with load 5
```

Path is currently at node 6 with load 5 PRICER_C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER C: Found path with load 21 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 17 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 1 with load 10 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 1 with load 10 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 22 Path is currently at node 5 with load 5

```
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node [ 0 6 10 3 10 7 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 6, 10, 3, 10, 7, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 6 with load 5
Path is currentThere are no paths with negative reduced costs
Dual variables are [3.0227272727272734, -0.97727272727272, 7.545454545454547,
2.44318181818183, 3.7045454545454546, 5.2840909090908, 6.7045454545454545,
2.159090909090965, 1.5454545454545456, -0.045454545454546746, -0.0]
ly at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 28
```

```
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
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Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 28 Path is currently at node 10 with load 6 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18

```
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
                                 9 11 0 0 0 0 0 0 0 0 0 0 0 0
Path is curr[ 0 2 7 9 7 9 7
    0 0 0 0 0 0 0 0
                                      0 0 0]ently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is c
Labelling found path (0, 2, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -2.77272727272727 with farkas
urrently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
```

```
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load There are no paths with negative reduced
costs
Dual variables are [2.41666666666667, -0.47222222222223, 7.444444444444445,
2.29166666666667, 3.805555555555554, 4.9305555555556, 6.80555555555555,
1.80555555555555676, 1.44444444444444446, 0.05555555555555556, -0.0]10
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with
load 26
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 3 w[ 0 2 7 9 7 9 7 9 11 0 0 0 0 0 0 0
0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 2, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -3.2777777777775 with farkas
False.
ith load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 wFarkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, 0.0,
0.0, 0.0, -1.0, 0.0, 0.0
There are no paths with negative reduced costs
Dual variables are [2.14236111111111107, -0.569444444444446, 7.62152777777779,
2.15625, 3.8958333333333335, 4.8888888888888, 6.9027777777778,
1.619791666666667, 1.621527777777786, -0.6701388888888911, -0.0]
ith load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICE[ 0 2 7 9 7 9 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]R C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
```

PRICER_C: There are no paths with negative re Labelling found path (0, 2, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost Path already in variables with reduced cost -4.00347222222221 with farkas False. Farkas Values are [0.0, 0.0, 0.0, 0.0, -0.5, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0] There are no paths with negative reduced costs Dual variables are [2.1410256410256405, -0.5641025641025657, 7.628205128205128, 2.153846153846155, 3.897435897435897, 4.884615384615385, 6.897435897435899, 1.6217948717948705, 1.6282051282051277, -0.6794871794871806, -0.0] duced costs PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18

Path is currently at node 3 with load 7

Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7

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Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load [ 0 2 7 9 7 9 7 9 11 0 0 0 0 0 0
0 0 0 0 0 0 0
 Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at n
Labelling found path (0, 2, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -4.0128205128205146 with farkas
```

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False.
ode 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is cuThere are no paths with negative reduced costs
Dual variables are [1.0192307692307674, 0.42307692307692246, 7.403846153846153,
1.8846153846153832, 4.0769230769230775, 4.211538461538462, 7.0769230769230775,
0.9711538461538454, 1.4038461538461546, -0.3653846153846185, -0.0]
rrently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
```

Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5

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Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with loa[ 0 2 7 9 7 9 7 9 11 0 0 0 0
0 0 0 0 0 0 0 0 0
 PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path w
Labelling found path (0, 2, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -4.86538461538462 with farkas False.
```

```
There are no paths with negative reduced costsith load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is curre
Dual variables are [1.0192307692307718, 0.42307692307692385, 7.403846153846157,
1.8846153846153832, 4.0769230769230775, 4.211538461538461, 7.076923076923074,
0.9711538461538485, 1.4038461538461569, -0.3653846153846185, -0.0]
ntly at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
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PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5

Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6

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Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Pat[ 0 2 7 9 7 9 7 9 11 0
                                  0
                                     0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]h is currently at node 8 with
load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is
Labelling found path (0, 2, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -4.865384615384617 with farkas
```

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False.
currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICERThere are no paths with negative reduced costs
Dual variables are [0.8181818181818166, 0.59999999999988, 3.945454545454545418,
1.836363636363636, 4.10909090909090, 4.0909090909092, 7.1090909090909,
0.8181818181818166, 1.3636363636363644, 3.1090909090909093, -0.0]
_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
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PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7

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Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
```

```
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found p[ 0 2 7 9 7 9 7 9 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]ath with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is curre
Labelling found path (0, 2, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -5.0181818181819 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0]ntly
at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
```

```
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRIC
There are no paths with negative reduced costs
Dual variables are [0.14864864864964913, 1.1891891891895, 5.351351351351351,
1.6756756756756763, 4.216216216216216, 3.6891891891895, 7.216216216216216,
0.14864864864913, 1.2297297297297298, 1.756756756756, -0.0] ER_C: Found
path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with loa
d 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
```

```
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
```

Path is currently at node 4 with load 6

PRICER_C: Capacity is 30

PRICER_C: There are no paths with negative reduced costs

PRICER_C: Capacity is 30

PRICER_C: Found path with load 17

Path is currently at node 3 with load 7

PRICER_C: Found path with load 15

Path is currently at node 3 with load 7

PRICER_C: Found path with load 23

Path is currently at node 10 with load 6

Path is currently at node 3 with load 7

PRICER_C: Found path with load 23

Path is currently at node 3 with load 7

Path is currently at node 10 with load 6

PRICER_C: Found path with load 25

Path is currently at node 3 with load 7

Path is currently at node 1 with load 10

PRICER_C: Found path with load 21

Path is currently at node 10 with load 6

Path is currently at node 3 with load 7

PRICER_C: Found path with load 17

Path is currently at node 3 with load 7

Path is currently at node 7 with load 2

PRICER_C: Found path with load 21

Path is currently at node 3 with load 7

Path is currently at node 10 with load 6

PRICER_C: Found path with load 24

Path is currently at node 3 with load 7

Path is currently at node 1 with load 10

PRICER_C: Found path with load 22

Path is currently at node 8 with load 5

Path is currently at node 1 with load 10

PRICER_C: Found path with load 20

Path is currently at node 3 with load 7

Path is currently at node 10 with load 6

PRICER C: Found path with load 18

Path is currently at node 6 with load 5

Path is currently at node 10 with load 6

PRICER_C: Found path with load 18

Path is currently at node 3 with load 7

Path is currently at node 10 with load 6

PRICER_C: Found path with load 30

Path is currently at node 3 with load 7

Path is currently at node 10 with load 6

Path is currently at node 3 with load 7

PRICER_C: Found path with load 28

Path is currently at node 6 with load 5

Path is currently at node 10 with load 6

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is curre[ 0 2 7 9 7 9 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0
  0
  0 0 0 0 0 0 0 0 0 0 0
                                       0 0 0]ntly at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
```

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
Labelling found path (0, 2, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -5.5270270270245 with farkas
Farkas Values are [0.0, 0.0, 0.0, 0.0, -0.5, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]
There are no paths with negative reduced costsRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10
Dual variables are [0.3518518518518512, 0.4814814814814814, 7.175925925925926,
2.8703703703703702, 4.88888888888889, 3.3703703703702, 7.888888888888889,
0.23148148148148096, 0.388888888888893, -0.518518518519, -0.0]
with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
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Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER C: Found path with load 15 Path is currently at node 3 with load 7 PRICER C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
```

```
Path is currently at node [ 0 2 7 9 7 9 7 9 11 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C:
Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Capacity is 30
PRICER_C: Labelling found path (0, 2, 7, 9, 7, 9, 7, 9, 11) with negative
reduced cost
Path already in variables with reduced cost -4.314814814817 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0] Found
path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found pa
There are no paths with negative reduced costs
Dual variables are [0.4666666666666545, 0.21904761904762138, 7.261904761904761,
3.2476190476190463, 5.085714285714287, 3.304761904761901, 8.085714285714285,
0.19047619047619002, 0.14285714285714235, -1.6666666666666666, -0.0]
th with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
```

Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 29 Path is currently at node 9 with load 5 Path is currently at node 6 with load 5

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Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
```

```
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is curre[ 0 2 7 9 7 9 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0
                                        0 0 0]ntly at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is cur
Labelling found path (0, 2, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -3.904761904761905 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]
rently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
```

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is There are no paths with negative reduced costs
Dual variables are [0.6666666666666661, -0.23809523809523725, 6.976190476190476,
3.9047619047619024, 5.428571428571431, 3.19047619047619, 8.428571428571429,
-0.2380952380952408, -0.2857142857142865, -3.666666666666666, -0.0]
currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

```
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
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```
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path[ 0 5 4 5 4 7 10 11 0 0 0 0 0 0 0 0 0 0 0
0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is c
Labelling found path (0, 5, 4, 5, 4, 7, 10, 11) with negative reduced cost
Added (0, 5, 4, 5, 4, 7, 10, 11) with path weight 23
There are 2 occurences of node 4
There are 2 occurences of node 5
There are 1 occurences of node 7
There are 1 occurences of node 10
Dual variables are [0.666666666666661, -0.23809523809523725, 6.976190476190476,
3.9047619047619024, 5.428571428571431, 3.19047619047619, 8.428571428571429,
-0.2380952380952408, -0.2857142857142865, -4.095238095238095, -0.0]
urrently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

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Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
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Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

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Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is current [ 0 5 4 5 4 7 9 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]ly at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Labelling found path (0, 5, 4, 5, 4, 7, 9, 11) with negative reduced cost
Added (0, 5, 4, 5, 4, 7, 9, 11) with path weight 22
There are 2 occurences of node 4
There are 2 occurences of node 5
There are 1 occurences of node 7
There are 1 occurences of node 9
Dual variables are [0.16417910447760775, 0.9104477611940314, 6.820895522388054,
2.2537313432835813, 4.567164179104478, 3.477611940298506, 7.567164179104478,
0.16417910447760775, 0.7910447761194039, 0.43283582089553363, -0.0
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
```

PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 24

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Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
```

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
                                            7 9 7 9 7 9 11 0 0 0 0
Path is currently at node 2 with load 8[ 0 2
0 0 0 0 0 0 0 0 0 0
 Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7
Labelling found path (0, 2, 7, 9, 7, 9, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -4.9850746268656785 with farkas
Farkas Values are [0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]
There are no paths with negative reduced costswith load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currentl
Dual variables are [0.666666666666647, -0.23809523809523592, 6.976190476190475,
3.9047619047619038, 5.428571428571429, 3.190476190476187, 8.428571428571429,
-0.23809523809524347, -0.2857142857142865, -4.095238095238094, -0.0]
y at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
```

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Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

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Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
```

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Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently[ 0 5 4 5 4 7 10 11 0 0 0 0 0 0 0 0 0 0 0 0
0 0 0
       0 0 0 0 0 0 0 0 0 0 0 0 0 0]
Labelling found path (0, 5, 4, 5, 4, 7, 10, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0] at
node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path i
There are no paths with negative reduced costs
Dual variables are [0.7910447761193993, -0.5223880597014917, 6.798507462686565,
4.313432835820894, 5.64179104477612, 3.1194029850746254, 8.64179104477612,
-0.5223880597014983, -0.5522388059701484, -5.552238805970148, -0.0]
s currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
```

```
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with 1[ 0 5 4 5 4 7 9 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0
                                        0 0 0]oad 2
                               0
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

```
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at no
Labelling found path (0, 5, 4, 5, 4, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -6.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]de 10
with load 6
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C:
There are no paths with negative reduced costs
Dual variables are [-1.7647058823529491, -0.11764705882352985,
5.794117647058824, 4.779411764705883, 7.852941176470592, 0.7058823529411721,
9.176470588235293, -3.470588235294116, -1.220588235294116, -11.441176470588244,
-0.0]
Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
```

```
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 16
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
```

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Path is currently at node 10 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 10 with load 6
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
```

```
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8[ 0 5 4 5 9 7 8 11 0 0 0 0
0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 5, 4, 5, 9, 7, 8, 11) with negative reduced cost
Added (0, 5, 4, 5, 9, 7, 8, 11) with path weight 23
There are 1 occurences of node 4
There are 2 occurences of node 5
There are 1 occurences of node 7
There are 1 occurences of node 8
There are 1 occurences of node 9
Dual variables are [-1.7647058823529491, -0.11764705882352985,
5.794117647058824, 4.779411764705883, 7.852941176470592, 0.7058823529411721,
9.176470588235293, -5.441176470588245, -1.220588235294116, -11.441176470588244,
-0.0]
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
```

```
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
```

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Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
```

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Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
```

```
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 5 with loa[ 0 5 4 5 9 7 8 11 0 0 0 0 0
0 0 0 0 0 0 0 0 0
    0 0 0 0 0 0 0 0 0
                                  0 0
                                       0 0 0ld 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
```

```
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 wit
Labelling found path (0, 5, 4, 5, 9, 7, 8, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, -1.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path There are no paths with negative reduced costs
Dual variables are [-1.7707641196013117, -1.4584717607973445, 5.313953488372093,
6.4086378737541505, 8.142857142857135, 1.086378737541537, 9.943521594684386,
-7.458471760797325, -2.179401993355482, -16.04651162790696, -0.0]
with load 29
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
```

```
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at no[ 0 7 4 5 4 7 9 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]de 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is curre
Labelling found path (0, 7, 4, 5, 4, 7, 9, 11) with negative reduced cost
Path already in variables with reduced cost -7.667774086378728 with farkas
Dual variables are [-12.333333333333336, -4.0, 7.939393939393938,
11.666666666666668, 12.0, -4.2323232323234, 15.0, -24.2323232323235,
-3.43434343434325, -39.333333333333336, -0.0]
ntly at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
```

```
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
```

```
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
```

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Capacity is 30
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
```

```
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
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Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
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Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
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Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
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PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
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Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path i[ 0 7 5 4 5 7 9 11 0
                                  0
                                     0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]s currently at node 5 with load
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Labelling found path (0, 7, 5, 4, 5, 7, 9, 11) with negative reduced cost
Added (0, 7, 5, 4, 5, 7, 9, 11) with path weight 37
th is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
```

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Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with There are 1 occurences of node 4
There are 2 occurences of node 5
There are 2 occurences of node 7
There are 1 occurences of node 9
Dual variables are [-2.7644230769230766, -0.5384615384615374, 7.581730769230767,
3.0817307692307683, 6.8076923076923075, 1.9615384615384608, 9.807692307692307,
-4.192307692307692, 0.6875000000000009, -6.586538461538458, -0.0]
load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
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PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
```

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Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
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Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
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Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
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Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
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Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 5 with load 5
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PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
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PRICER C: Found path with load 27
Path is currently at node 3 with load 7
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Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
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Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
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Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
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Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
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Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
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Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
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Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at n[ 0 7 9 7 9 7 9 7 9 7 11 0 0 0 0 0 0 0
0 0 0 0 0
    0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] ode 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Capacity is 30
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 17
Path is currently at node
Labelling found path (0, 7, 9, 7, 9, 7, 9, 7, 11) with negative reduced
Path already in variables with reduced cost -0.0 with farkas False.
Dual variables are [-12.0, -4.0, 9.0, 8.35576923076923, 12.0,
-3.00000000000001, 15.0, -23.0, -1.3557692307692308, -32.71153846153846, -0.0
3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
```

```
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 20
```

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Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
```

```
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
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```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 13
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
```

```
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
```

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PRICER_C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load[ 0 7 4 5 4 6 11 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
```

```
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4
Labelling found path (0, 7, 4, 5, 4, 6, 11) with negative reduced cost
Added (0, 7, 4, 5, 4, 6, 11) with path weight 23
with load 6
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found pThere are 2 occurences of node 4
There are 1 occurences of node 5
There are 1 occurences of node 6
There are 1 occurences of node 7
Dual variables are [-42.8, -5.33333333333333, -0.266666666666675,
2.73333333333335, 10.8666666666667, -10.3333333333333, 17.0, -29.4,
10.93333333333334, -31.6, -0.0]
ath with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
PRICER_C: Found path with load 13
Path is currently at node 3 with load 7
PRICER_C: Found path with load 11
Path is currently at node 5 with load 5
PRICER_C: Found path with load 8
```

Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 3 with load 7 PRICER_C: Found path with load 11 Path is currently at node 4 with load 6 PRICER_C: Found path with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 9 Path is currently at node 3 with load 7 PRICER_C: Found path with load 7 Path is currently at node 5 with load 5 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 15 Path is currently at node 7 with load 2 Path is currently at node 4 with load 6 PRICER C: Found path with load 16 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 5 with load 5 PRICER_C: Found path with load 17 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 13 Path is currently at node 7 with load 2 Path is currently at node 5 with load 5 PRICER C: Found path with load 16 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 13 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16

Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 13 Path is currently at node 7 with load 2 Path is currently at node 4 with load 6 PRICER_C: Found path with load 16 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER C: Found path with load 11 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 PRICER C: Found path with load 15 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 PRICER_C: Found path with load 13 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 13 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 10 Path is currently at node 7 with load 2 Path is currently at node 4 with load 6 PRICER C: Found path with load 13 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5

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Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
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Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
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Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER C: Found path with load 15
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 14
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
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Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
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PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
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Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
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PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
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Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
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Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
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Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
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Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
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Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
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Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
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Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
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Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
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Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
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Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Capacity is 30 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 5 with load 5 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 15 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER_C: Found path with load 16 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 23 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 21 Path is currently at node 7 with load 2 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2 PRICER_C: Found path with load 23 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 7 with load 2

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PRICER_C: Found path with load 20
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER_C: Found path with load 22
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER C: Found path with load 20
Path is currently at node 9 with load 5
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PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
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PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
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Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
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Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is c[ 0 7 9 7 9 7 9 7 9 7 11 0 0 0 0 0 0 0 0 0 0
                                       0 0 0]urrently at node 4 with load 6
    0 0 0 0 0 0 0 0 0 0 0
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Labelling found path (0, 7, 9, 7, 9, 7, 9, 7, 11) with negative reduced
cost
Path already in variables with reduced cost 125.7907692307692 with farkas False.
Dual variables are [6.57575757575757578, 2.212121212121212, 8.848484848484848,
4.33333333333334, 2.242424242424242, 3.60606060606055, 4.121212121212121,
3.8484848484846, -0.393939393939397, 1.84848484848486, -0.0]
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
PRICER C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Fo[ 0 3 10 6 4 5 11 0 0 0 0 0 0 0 0 0 0 0 0 0
0 0
    0 0 0 0 0 0 0 0 0
                                 0
                                      0 0 0]und path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Labelling found path (0, 3, 10, 6, 4, 5, 11) with negative reduced cost
Added (0, 3, 10, 6, 4, 5, 11) with path weight 19
There are 1 occurences of node 3
There are 1 occurences of node 4
There are 1 occurences of node 5
There are 1 occurences of node 6
There are 1 occurences of node 10
4.16666666666667, 1.8333333333333334, 2.8333333333333, 3.666666666666668,
4.499999999999, 0.666666666666661, 2.5000000000000004, -0.0]
th is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
```

```
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

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Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 9
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] is currently at node 7 with
load 2
PRICER_C: Found path with load 13
Path is currently at node 3 with load 7
PRICER_C: Found path with load 11
Path is currently at node 5 with load 5
PRICER_C: Found path with load 12
Path is currently at node 3 with load 7
PRICER C: Found path with load 11
Path is currently at node 4 with load 6
PRICER_C: Found path with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 9
Path is currently at node 3 with load 7
PRICER_C: Found path with load 7
Path is currently at node 5 with load 5
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 15
Path is currently at node 7 with load 2
Path is currently at node 4 with
Labelling found path (0, 3, 10, 3, 10, 7, 11) with negative reduced cost
Path already in variables with reduced cost -2.0 with farkas False.
load 6
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 17
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 13
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 18
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 5 with load 5
Path isThere are no paths with negative reduced costs
Dual variables are [6.4999999999999, 2.4999999999973, 7.66666666666666666,
4.499999999999, 0.666666666666634, 2.500000000000013, -0.0]
currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 13
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
```

PRICER_C: Found path with load 16 Path is currently at node 9 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 14 Path is currently at node 3 with load 7 Path is currently at node 7 with load 2 PRICER C: Found path with load 12 Path is currently at node 5 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER_C: Found path with load 12 Path is currently at node 7 with load 2 Path is currently at node 2 with load 8 PRICER_C: Found path with load 11 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 PRICER C: Found path with load 13 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 10 Path is currently at node 7 with load 2 Path is currently at node 4 with load 6 PRICER_C: Found path with load 13 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 Path is currently at node 5 with load 5 PRICER_C: Found path with load 9 Path is currently at node 7 with load 2 Path is currently at node 9 with load 5 PRICER C: Found path with load 26 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 24 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 23 Path is currently at node 9 with load 5 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6

```
PRICER_C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
```

```
PRICER_C: Found path with load 22
Path is currently at node 4 [ 0 3 10 3 10 7 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at nod
Labelling found path (0, 3, 10, 3, 10, 7, 11) with negative reduced cost
Path already in variables with reduced cost -1.999999999999 with farkas
False.
There are no paths with negative reduced costse 4 with load 6
PRICER C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
PRICER_C: Found path with load 19
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER_C: Found path with load 18
Path is currently at node
Dual variables are [6.714285714285715, 1.714285714285712, 6.571428571428571,
3.357142857142856, 2.142857142857144, 3.500000000000036, 3.642857142857144,
4.785714285714285, 1.2857142857142851, 3.4285714285714293, -0.0]
3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 16
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
PRICER C: Found path with load 19
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 18
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 16
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
```

```
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 15
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 14
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
PRICER C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 14
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 5 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is cu[ 0 6 10 3 10 6 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
                                        0 0 0]rrently at node 7 with load 2
    0 0 0 0 0 0 0 0
                               0
                                  0
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 29
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Labelling found path (0, 6, 10, 3, 10, 6, 11) with negative reduced cost
Path already in variables with reduced cost -5.428571428571438 with farkas
False.
Dual variables are [6.230769230769227, 1.923076923076927, 7.358974358974364,
4.269230769230768, 2.4871794871794877, 5.051282051282049, 4.410256410256406,
3.948717948717951, -1.7307692307692317, -0.6410256410256352, -0.0]
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 26
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
```

Path is currently at node 5 with load 5

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
PRICER_C: Found path with load 23
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 4 with load 6
ERROR: Path length exceeds maximum. Current value of path len is 33
PRIC[ 0 6 4 6 4 6 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0]ER_C: Capacity is 30
PRICER_C: Found path with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 7
Path is currently at node 7 with load 2
```

```
PRICER_C: Found path with load 10
Path is currently at node 9 with load 5
PRICER_C: Found path with load 7
Path is currently at node 5 with load 5
PRICER C: Found path with load 7
Path is currently at node 9 with load 5
PRICER C: Found path with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 16
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 14
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER C: Found path with load 12
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
PRICER C:
Labelling found path (0, 6, 4, 6, 4, 6, 11) with negative reduced cost
Path already in variables with reduced cost -6.692307692307686 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, -0.5, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]
Found path with load 12
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 15
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 12
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 13
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 14
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
PRICER_C: Found path with load 13
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
PRICER_C: Found path with load 12
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
```

```
PRICER_C: Found path with load 9
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 15
Path is currently at node 2 with load 8
Path is currently at nodThere are no paths with negative reduced costse 7 with
PRICER_C: Found path with load 14
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
PRICER_C: Found path with load 12
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 17
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node
Dual variables are [4.96666666666666, 2.866666666666676, 9.0,
4.4888888888889, 2.07777777777775, 4.9888888888889, 3.46666666666655,
4.5777777777778, -2.4222222222225, -1.5555555555555554, -0.0]
4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 21
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 19
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 18
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
```

```
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 16
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 15
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 14
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 14
Path is currently at node [ 0 6 4 6 4 6 11 0 0 0 0 0 0 0 0 0 0
0 0 0 0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 6, 4, 6, 4, 6, 11) with negative reduced cost
Path already in variables with reduced cost -6.9444444444444 with farkas
False.
Farkas Values are [0.0, 0.0, 0.0, 0.0, -0.5, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]
6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 14
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 17
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 14
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 23
Path is currently at nThere are no paths with negative reduced costs
Dual variables are [5.067375886524822, 2.76595744680851, 9.0, 4.606382978723405,
2.26241134751773, 4.8546099290780145, 3.567375886524823, 4.51063829787234,
-2.4893617021276606, -1.7234042553191502, -0.0]
ode 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 22
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 22
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 19
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
PRICER_C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 20
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 19
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 16
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 19
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 20
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
P[ 0 6 4 6 4 6 11 0 0 0 0 0 0 0 0
                                                 0 0 0 0 0 0 0
 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Labelling found path (0, 6, 4, 6, 4, 6, 11) with negative reduced cost
Path already in variables with reduced cost -6.776595744680854 with farkas
Dual variables are [-9.0, -13.0, -3.0, -3.0, 3.0, -1.0, 17.0, -9.0, -11.0, -9.0,
-0.0]ath is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
PRICER_C: Found path with
There are no paths with negative reduced costs
Dual variables are [4.637254901960786, 3.823529411764705, 9.0,
5.029411764705882, 1.9803921568627454, 4.6078431372549025, 2.3725490196078436,
5.352941176470588, -3.4411764705882346, -1.6176470588235299, -0.0]
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER C: Found path with load 27
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
```

```
PRICER_C: Found path with load 30
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 28
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
PRICER_C: Found path with load 25
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is cur[ 0 2 5 4 6 10 11 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
                                          0 0]rently at node 6 with load 5
       0 0 0 0 0 0 0 0
                                  0
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 24
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 21
Path is currently at node 5 with load 5
Path is currently at node 7 with lo
Labelling found path (0, 2, 5, 4, 6, 10, 11) with negative reduced cost
Added (0, 2, 5, 4, 6, 10, 11) with path weight 10
There are 1 occurences of node 2
There are 1 occurences of node 4
There are 1 occurences of node 5
There are 1 occurences of node 6
There are 1 occurences of node 10
```

```
Dual variables are [4.637254901960786, 3.823529411764705, 9.0,
5.029411764705882, 1.9803921568627454, 4.6078431372549025, 2.3725490196078436,
5.352941176470588, -3.4411764705882346, -5.441176470588235, -0.0]
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 21
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 21
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 21
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 22
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 21
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7[ 0 2 5 4 6 10 11 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0
    Labelling found path (0, 2, 5, 4, 6, 10, 11) with negative reduced cost
Path already in variables with reduced cost -0.0 with farkas False.
Farkas Values are [0.0, 0.0, 0.0, -0.5, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0, 0.0]
with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is cuThere are no paths with negative reduced costs
Dual variables are [-3.018691588785048, 7.710280373831775, 2.065420560747663,
6.584112149532708, 0.9439252336448611, 3.7009345794392523, -4.364485981308411,
10.794392523364486, -6.939252336448598, -8.939252336448597, -0.0]
rrently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

```
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
```

```
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 23
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is curre[ 0 2 5 4 6 4 11 0 0 0
                                               0 0 0 0 0 0 0 0 0 0
0 0
  0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0] ntly at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 26
Path is currently at node 9 with load 5
```

```
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 27
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with loa
Labelling found path (0, 2, 5, 4, 6, 4, 11) with negative reduced cost
Path already in variables with reduced cost -7.523364485981304 with farkas
False.
\{(0, 1, 11): t_x1, (0, 2, 11): t_x2, (0, 3, 11): t_x3, (0, 4, 11): t_x4, (0, 5, 11): t_x4, (0, 11): t_x4, (0,
11): t_x5, (0, 6, 11): t_x6, (0, 7, 11): t_x7, (0, 8, 11): t_x8, (0, 9, 11):
t_x9, (0, 10, 11): t_x10, (0, 1, 4, 5, 6, 11): x11, (0, 1, 4, 5, 4, 11): x12,
(0, 2, 10, 7, 9, 11): x13, (0, 7, 8, 7, 4, 11): x14, (0, 2, 7, 5, 6, 11): x15,
(0, 8, 7, 9, 6, 5, 9, 6, 11): x16, (0, 1, 7, 8, 6, 11): x17, (0, 5, 7, 8, 3, 9, 6, 11): x17, (0, 5, 7, 8, 3, 9, 6, 11): x17, (0, 5, 7, 8, 3, 9, 6, 11): x17, (0, 5, 7, 8, 3, 9, 6, 11): x17, (0, 5, 7, 8, 3, 9, 6, 11): x17, (0, 5, 7, 8, 3, 9, 6, 11): x17, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 3, 9, 6, 11): x18, (0, 5, 7, 8, 11)
11): x18, (0, 8, 7, 8, 7, 9, 4, 8, 7, 9, 11): x19, (0, 3, 10, 8, 7, 11): x20,
(0, 8, 1, 8, 7, 8, 7, 11): x21, (0, 5, 4, 5, 4, 10, 11): x22, (0, 6, 4, 6, 4, 8, 10, 11): x21, (0, 11): x21, (0,
7, 11): x23, (0, 2, 8, 9, 4, 6, 11): x24, (0, 8, 10, 8, 10, 8, 7, 11): x25, (0,
9, 5, 9, 5, 9, 5, 11): x26, (0, 2, 5, 1, 8, 7, 11): x27, (0, 3, 10, 1, 9, 7,
11): x28, (0, 6, 10, 6, 9, 11): x29, (0, 6, 10, 3, 10, 8, 11): x30, (0, 9, 7, 9, 10)
7, 9, 7, 9, 7, 11): x31, (0, 2, 7, 9, 7, 9, 7, 9, 11): x32, (0, 9, 1, 9, 1, 11):
x33, (0, 2, 5, 4, 6, 4, 11): x34, (0, 8, 1, 8, 7, 8, 11): x35, (0, 2, 5, 4, 5,
9, 11): x36, (0, 3, 10, 3, 10, 11): x37, (0, 6, 4, 6, 4, 6, 11): x38, (0, 2, 7,
2, 7, 11): x39, (0, 2, 7, 2, 5, 11): x40, (0, 2, 3, 10, 3, 7, 11): x41, (0, 2,
10, 4, 6, 11): x42, (0, 3, 10, 4, 6, 11): x43, (0, 9, 1, 9, 7, 11): x44, (0, 2,
9, 1, 9, 7, 11): x45, (0, 2, 1, 8, 9, 7, 11): x46, (0, 2, 8, 1, 8, 7, 11): x47,
(0, 2, 5, 9, 6, 11): x48, (0, 2, 3, 2, 9, 7, 11): x49, (0, 5, 9, 1, 8, 11): x50,
(0, 1, 7, 1, 7, 10, 11): x51, (0, 1, 7, 1, 7, 9, 11): x52, (0, 2, 7, 2, 7, 2, 7, 1)
11): x53, (0, 2, 7, 8, 7, 9, 11): x54, (0, 2, 7, 2, 7, 9, 11): x55, (0, 2, 7, 1,
7, 9, 11): x56, (0, 2, 7, 1, 7, 2, 11): x57, (0, 2, 7, 8, 1, 9, 11): x58, (0, 2,
7, 8, 7, 8, 7, 9, 11): x59, (0, 2, 7, 8, 7, 8, 7, 8, 11): x60, (0, 3, 10, 3, 10,
7, 11): x61, (0, 2, 7, 2, 7, 2, 7, 11): x62, (0, 2, 5, 4, 5, 4, 11): x63, (0, 7,
4, 7, 4, 7, 4, 7, 11): x64, (0, 7, 6, 7, 10, 7, 10, 7, 9, 11): x65, (0, 7, 3, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7, 10, 7,
6, 7, 5, 11): x66, (0, 7, 6, 7, 10, 7, 10, 7, 8, 11): x67, (0, 7, 3, 7, 6, 7, 6,
7, 11, 3, 7, 6, 7, 9, 11): x68, (0, 7, 6, 7, 6, 7, 6, 7, 6, 7, 11): x69, (0, 7,
2, 7, 2, 7, 10, 7, 11): x70, (0, 7, 2, 7, 2, 7, 8, 7, 11): x71, (0, 7, 2, 7, 9,
7, 2, 7, 11): x72, (0, 7, 3, 7, 3, 7, 3, 7, 11): x73, (0, 7, 2, 7, 5, 7, 2, 7,
11): x74, (0, 7, 2, 7, 2, 7, 6, 11): x75, (0, 5, 1, 5, 2, 7, 11): x76, (0, 5, 4,
5, 4, 6, 11): x77, (0, 9, 1, 9, 6, 11): x78, (0, 9, 8, 9, 8, 9, 8, 11): x79, (0,
2, 10, 8, 10, 8, 11): x80, (0, 2, 5, 9, 8, 11): x81, (0, 2, 10, 9, 6, 11): x82,
(0, 2, 10, 3, 10, 11): x83, (0, 2, 9, 4, 9, 4, 11): x84, (0, 2, 4, 9, 4, 9, 11):
x85, (0, 2, 8, 9, 6, 9, 11): x86, (0, 2, 3, 2, 7, 9, 11): x87, (0, 3, 10, 3, 8,
9, 11): x88, (0, 3, 10, 8, 7, 8, 11): x89, (0, 5, 1, 3, 10, 11): x90, (0, 6, 4,
6, 9, 7, 8, 11): x91, (0, 6, 4, 6, 4, 6, 7, 11): x92, (0, 6, 4, 6, 4, 9, 11):
x93, (0, 2, 5, 4, 6, 9, 11): x94, (0, 2, 7, 9, 4, 6, 11): x95, (0, 5, 2, 5, 6,
10, 11): x96, (0, 2, 5, 6, 5, 9, 11): x97, (0, 2, 5, 6, 5, 6, 11): x98, (0, 2,
```

Path is currently at node 7 with load 2

3, 2, 8, 7, 11): x99, (0, 2, 5, 4, 6, 11): x100, (0, 2, 3, 8, 6, 9, 11): x101,(0, 2, 8, 2, 8, 7, 11): x102, (0, 2, 8, 6, 9, 11): x103, (0, 2, 8, 6, 8, 11):x104, (0, 2, 5, 6, 4, 6, 11): x105, (0, 2, 3, 8, 9, 6, 11): x106, (0, 2, 3, 8, 7, 8, 11): x107, (0, 8, 7, 8, 7, 8, 7, 8, 11): x108, (0, 6, 4, 5, 4, 8, 11): x109, (0, 8, 10, 8, 10, 8, 11): x110, (0, 2, 5, 4, 6, 8, 11): x111, (0, 6, 9, 6, 9, 6, 9, 11): x112, (0, 6, 5, 6, 5, 6, 9, 11): x113, (0, 8, 9, 6, 5, 6, 9, 11): x114, (0, 8, 4, 6, 4, 9, 11): x115, (0, 2, 8, 9, 8, 9, 11): x116, (0, 8, 4, 8, 4, 9, 11): x117, (0, 1, 10, 4, 10, 7, 11): x118, (0, 9, 1, 10, 9, 11): x119, (0, 3, 10, 1, 9, 11): x120, (0, 7, 9, 7, 9, 7, 9, 7, 9, 7, 11): x121, (0, 7, 9, 7, 9, 7, 9, 7, 9, 11): x122, (0, 1, 8, 7, 9, 7, 9, 11): x123, (0, 5, 4, 5, 4, 5, 11): x124, (0, 5, 10, 3, 10, 6, 11): x125, (0, 5, 1, 8, 7, 9, 11): x126, (0, 3, 1, 8, 7, 9, 11): x127, (0, 1, 8, 7, 8, 7, 9, 11): x128, (0, 5, 1, 8, 7, 8, 11): x129, (0, 3, 10, 8, 7, 9, 11): x130, (0, 8, 1, 8, 10, 11): x131, (0, 3, 1, 8, 7, 11): x132, (0, 3, 10, 7, 9, 7, 9, 11): x133, (0, 7, 5, 7, 10, 7, 10, 7, 9, 11): x134, (0, 7, 8, 7, 8, 7, 8, 7, 11): x135, (0, 4, 5, 4, 7, 8, 11): x136, 4, 7, 11): x139, (0, 4, 1, 8, 7, 8, 7, 11): x140, (0, 3, 10, 7, 8, 7, 9, 11): x141, (0, 8, 7, 8, 7, 8, 7, 8, 7, 11): x142, (0, 10, 8, 1, 9, 11): x143, (0, 8, 1, 8, 7, 9, 11): x144, (0, 10, 3, 10, 7, 9, 11): x145, (0, 10, 3, 10, 8, 11): x146, (0, 10, 3, 10, 3, 11): x147, (0, 1, 9, 7, 9, 7, 9, 11): x148, (0, 6, 4, 1, 9, 11): x149, (0, 5, 4, 1, 8, 11): x150, (0, 1, 10, 3, 10, 11): x151, (0, 1, 8, 7, 8, 7, 10, 11): x152, (0, 7, 4, 5, 4, 7, 9, 11): x153, (0, 7, 4, 5, 4, 5, 4, 11): x154, (0, 4, 5, 4, 5, 4, 7, 11): x155, (0, 3, 10, 3, 7, 8, 7, 11): x156, 9, 7, 3, 10, 11): x159, (0, 2, 7, 3, 7, 3, 7, 11): x160, (0, 3, 10, 3, 7, 9, 7, 11): x161, (0, 3, 7, 3, 7, 9, 7, 9, 11): x162, (0, 3, 7, 1, 7, 3, 7, 11): x163, 10, 8, 11): x166, (0, 10, 8, 10, 4, 5, 11): x167, (0, 10, 4, 10, 8, 10, 11): x168, (0, 10, 6, 10, 7, 10, 7, 11): x169, (0, 10, 6, 10, 7, 10, 6, 11): x170, 9, 7, 9, 7, 9, 11): x173, (0, 9, 7, 9, 7, 9, 7, 9, 11): x174, (0, 9, 5, 9, 5, 9, 6, 11): x175, (0, 9, 10, 9, 5, 9, 11): x176, (0, 9, 10, 8, 10, 9, 11): x177, (0, 9, 10, 9, 10, 9, 11): x178, (0, 10, 6, 10, 6, 10, 11): x179, (0, 10, 4, 10, 4, 10, 11): x180, (0, 10, 3, 10, 6, 10, 11): x181, (0, 9, 7, 9, 7, 9, 10, 11): x182, (0, 9, 1, 9, 7, 9, 11): x183, (0, 9, 7, 9, 10, 6, 10, 11): x184, (0, 9, 7, 9, 10, 8, 10, 11): x185, (0, 9, 7, 9, 10, 4, 10, 11): x186, (0, 9, 1, 9, 5, 9, 11): x187, (0, 2, 10, 6, 10, 9, 11): x188, (0, 9, 1, 9, 10, 11): x189, (0, 10, 3, 10, 8, 10, 11): x190, (0, 10, 3, 10, 9, 10, 11): x191, (0, 8, 1, 8, 1, 11): x192, (0, 1, 8, 7, 10, 7, 9, 11): x193, (0, 9, 7, 8, 10, 8, 10, 11): x194, (0, 1, 8, 7, 9, 7, 10, 11): x195, (0, 7, 5, 7, 5, 7, 5, 7, 5, 7, 11): x196, (0, 7, 1, 7, 10, 7, 10, 7, 11): x197, (0, 7, 1, 7, 1, 7, 11): x198, (0, 8, 7, 8, 1, 8, 11): x199, (0, 1, 8, 10, 7, 10, 11): x200, (0, 3, 1, 9, 7, 9, 11): x201, (0, 3, 9, 3, 10, 11): x202, (0, 9, 1, 3, 10, 11): x203, (0, 3, 4, 1, 8, 7, 11): x204, (0, 3, 7, 8, 1, 6, 11): x205, (0, 3, 7, 8, 7, 8, 7, 8, 7, 11): x206, (0, 4, 5, 7, 11): x206, (0, 11): x206, (4, 9, 7, 8, 11): x207, (0, 4, 6, 4, 9, 7, 8, 11): x208, (0, 3, 7, 8, 7, 8, 7, 9, 11): x209, (0, 8, 1, 3, 10, 11): x210, (0, 8, 1, 8, 7, 11): x211, (0, 6, 4, 6, 10, 3, 11): x212, (0, 5, 1, 8, 1, 11): x213, (0, 6, 4, 6, 4, 7, 8, 11): x214, (0, 6, 10, 3, 1, 7, 11): x215, (0, 6, 4, 6, 4, 10, 11): x216, (0, 6, 5, 6, 5, 6, 6, 6, 10, 11): x216, (0, 10, 11): x216, (0,

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5, 11): x217, (0, 5, 10, 3, 10, 9, 11): x218, (0, 6, 10, 3, 10, 6, 11): x219,
(0, 6, 4, 5, 4, 6, 11): x220, (0, 6, 10, 3, 10, 7, 11): x221, (0, 5, 4, 5, 4, 7, 11)
10, 11): x222, (0, 5, 4, 5, 4, 7, 9, 11): x223, (0, 5, 4, 5, 9, 7, 8, 11): x224,
(0, 7, 5, 4, 5, 7, 9, 11): x225, (0, 7, 4, 5, 4, 6, 11): x226, (0, 3, 10, 6, 4, 11)
5, 11): x227, (0, 2, 5, 4, 6, 10, 11): x228}
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 4 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 6 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
```

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Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 29
Path is currently at node 10 with load 6
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 9 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 27
```

Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6

Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 27 Path is currently at node 7 with load 2 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 8 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7

Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 27 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 23

Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29

Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27

Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30

```
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 22
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
```

PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7

PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 7 with load 2 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6

```
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 9 with load 5
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 9 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 29
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 28
Path is currently at node 7 with load 2
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER C: Found path with load 17
Path is currently at node 3 with load 7
PRICER C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 23
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 23
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 25
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Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER C: Found path with load 18 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 9 with load 5

Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 28 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 9 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 27 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 30 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 24 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 26 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER C: Found path with load 28 Path is currently at node 7 with load 2 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Capacity is 30 PRICER_C: Found path with load 17 Path is currently at node 3 with load 7 PRICER_C: Found path with load 15 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 25 Path is currently at node 3 with load 7

Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6

Path is currently at node 1 with load 10 PRICER_C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 24 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER_C: Found path with load 27 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 25 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 7 with load 2 PRICER_C: Found path with load 30 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 26 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7

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Path is currently at node 10 with load 6
PRICER_C: Found path with load 29
Path is currently at node 5 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
Path is currently at node 7 with load 2
PRICER C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
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PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 24 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5

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PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 8 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 29
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
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```
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
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Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 23
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 20
Path is currently at node 6 with load 5
Path is currently at node 3 with load 7
PRICER_C: Found path with load 21
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 19
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 18
Path is currently at node 6 with load 5
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
PRICER_C: Found path with load 22
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Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 20 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 26 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 6 with load 5 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER C: Found path with load 30 Path is currently at node 5 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7

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PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 28
Path is currently at node 8 with load 5
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
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Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 25
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 7 with load 2
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
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PRICER_C: Found path with load 30
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER C: Found path with load 26
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 1 with load 10
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PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 21 Path is currently at node 10 with load 6 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5

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Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
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Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
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Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 7 with load 2
Path is currently at node 3 with load 7
Path is currently at node 10 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER_C: Found path with load 17
Path is currently at node 3 with load 7
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
```

PRICER_C: Found path with load 25 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 23 Path is currently at node 6 with load 5 Path is currently at node 1 with load 10 PRICER C: Found path with load 23 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 25 Path is currently at node 1 with load 10 Path is currently at node 3 with load 7 PRICER_C: Found path with load 20 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER C: Found path with load 15 Path is currently at node 8 with load 5 Path is currently at node 7 with load 2 PRICER_C: Found path with load 22 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 28 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 Path is currently at node 3 with load 7 PRICER C: Found path with load 30 Path is currently at node 8 with load 5 Path is currently at node 1 with load 10 Path is currently at node 8 with load 5 PRICER_C: Found path with load 30 Path is currently at node 6 with load 5 Path is currently at node 3 with load 7 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 Path is currently at node 1 with load 10 PRICER_C: Found path with load 29 Path is currently at node 6 with load 5

```
Path is currently at node 4 with load 6
Path is currently at node 1 with load 10
PRICER_C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 3 with load 7
PRICER_C: Found path with load 30
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 25
Path is currently at node 7 with load 2
Path is currently at node 2 with load 8
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 3 with load 7
PRICER_C: Found path with load 28
Path is currently at node 8 with load 5
Path is currently at node 1 with load 10
Path is currently at node 5 with load 5
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 1 with load 10
```

```
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 25
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 7 with load 2
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 29
Path is currently at node 9 with load 5
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 10 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Capacity is 30
PRICER_C: There are no paths with negative reduced costs
PRICER_C: Capacity is 30
PRICER_C: Found path with load 15
Path is currently at node 3 with load 7
PRICER_C: Found path with load 13
Path is currently at node 5 with load 5
PRICER_C: Found path with load 13
Path is currently at node 6 with load 5
PRICER_C: Found path with load 13
```

Path is currently at node 8 with load 5 PRICER_C: Found path with load 22 Path is currently at node 2 with load 8 Path is currently at node 4 with load 6 PRICER C: Found path with load 19 Path is currently at node 5 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 19 Path is currently at node 8 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 21 Path is currently at node 2 with load 8 Path is currently at node 5 with load 5 PRICER_C: Found path with load 19 Path is currently at node 4 with load 6 Path is currently at node 5 with load 5 PRICER C: Found path with load 18 Path is currently at node 6 with load 5 Path is currently at node 5 with load 5 PRICER_C: Found path with load 16 Path is currently at node 6 with load 5 Path is currently at node 4 with load 6 PRICER_C: Found path with load 30 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 28 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8 Path is currently at node 3 with load 7 PRICER_C: Found path with load 29 Path is currently at node 3 with load 7 Path is currently at node 2 with load 8 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 5 with load 5 Path is currently at node 2 with load 8 Path is currently at node 4 with load 6 PRICER_C: Found path with load 27 Path is currently at node 8 with load 5 Path is currently at node 2 with load 8

```
Path is currently at node 4 with load 6
PRICER_C: Found path with load 27
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 25
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 28
Path is currently at node 3 with load 7
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 27
Path is currently at node 4 with load 6
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER C: Found path with load 26
Path is currently at node 5 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 6 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 8 with load 5
Path is currently at node 2 with load 8
Path is currently at node 5 with load 5
PRICER_C: Found path with load 26
Path is currently at node 3 with load 7
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 24
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
```

```
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER_C: Found path with load 30
Path is currently at node 8 with load 5
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
PRICER C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
PRICER_C: Found path with load 30
Path is currently at node 4 with load 6
Path is currently at node 6 with load 5
Path is currently at node 4 with load 6
Path is currently at node 5 with load 5
objective value:
                                                    33
x127
                                                    1
                                                         (obj:23)
x228
                                                         (obj:10)
```

1.1 Old Labelling

```
weight -= dual[node-1]
    load += self.model.graph.nodes()[node]['demand']
    if weight < 0 and load <= self.data['capacity']:
        var = self.model.addVar(vtype="B",obj=nx.path_weight(self.
omodel.graph,path,"weight"),pricedVar=True)
    for node in path[1:-1]:
        self.model.addConsCoeff(self.data['cons'][node-1], var_u
o,1)

self.model.addConsCoeff(self.data['cons'][-1], var, 1)
    self.data['vars'][tuple(path)] = var
        print(f"Found path {path} with negative reduced cost")
        return {'result':SCIP_RESULT.SUCCESS}
    return {'result':SCIP_RESULT.SUCCESS}</pre>
```