SCT_Graph_Application_Research_OS

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1 Linking content with context: SCT graph application research demo

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The ultimate objective of this demo is to return a selection of geographic features across interactive multiscale view space. In other words a set of features that can automatically be used as the basis of a front-end interface that includes pan and continuous zoom. The visualisation in 'a' below summarises the final output of the demo with an annotated version provided at the end of the notebook. The relationship between this approach to data selection and an output map view is illustrated below in 'b'. Here we see features corresponding to a square subset of view space. The fundamental functionality supported by the concepts and techniques presented here is to determine, given a specific context, the probability of each feature in the database being present in a given square subset of view space.

Figure 1: data selection demo example & illustration of a lateral slice through view space

```
[1]: %%html <img src="img/fig_1.png", width=1000, height=200>
```

<IPython.core.display.HTML object>

The demo is divided into five overall activities:

- 1. Import classes and functions for the demo
- 2. Connect to the database server and create a graph
- 3. Return a subgraph based on the routing result
- 4. Return features by phase region using the spatial index
- 5. Construct a causal net instance and run variable activation over the net via message propagation

1.0.1 1. Import classes and functions for the demo

```
[1]: import csv import json
```

Import a graph class for creating a graph object, executing write transactions and executing read transactions by using both the spatial index and by using pattern matching, i.e. queries in topological graph space.

```
[2]: from geo_graph import Graph, get_coords
```

Import function to parse the routing result and assign propagation matrices.

```
[3]: from journey_context import get_context
```

Import functions for deriving phase region bounding boxes from the routing result.

```
[4]: from phase_region import get_vectors_from_wkt, sqr, euclidean_distance, ⊔
→midpoint, get_region_bbox
```

Import classes and functions for creating a causal net and a template for the output data.

```
[5]: from causal_net import Variable, Arc, construct_variables, construct_arcs, ⊔

→feature_view_template
```

Import functions for propagating context over the net.

1.0.2 2. Connect to the database server and create a graph

Create a graph object for executing both read and write transactions to a graph database.

```
[7]: #change to the username and password you have set for your db instance graph_object = Graph("bolt://localhost:7687", "username", "password")
```

Add constraints on graph vertices to ensure each vertex is unique (will take a moment).

```
[9]: # ONLY TO BE RUN ONCE graph_object.add_vertex_constraints()
```

Load vertex and edge data for the demo after ensuring the vertex constraints have been updated (i.e. check in the neo4j browser interface on http://localhost:7474).

This will take a few moments.

```
[10]: # ONLY TO BE RUN ONCE
graph_object.load_data_from_csv()
```

Table 1. Terminology

This table is included for reference as there is potential for some confusion with the terminology. For example a network segment would have a polyline geometry property, but is stored as a graph vertex, and would be represented in a *CN* as a variable.

Representation domain	Vertices	Edges
Graph data model	Vertices	Edges
Routing network	Nodes	Segments
Causal net instance	Variables	Arcs

Table 2. Graph vertex types

Point feature geometries are included only. BOROUGH_TEXT objects are loaded as disconnected vertices and so can only be returned through a spatial query.

Label	Description	
NK	k-level routing network node	
SK	k-level routing network segment	
SK_PLUS_ONE	k+1-level routing network segment (bus/	
	train network)	
SK_MINUS_ONE	k-1-level routing network segment (high	
	detail pedestrian routing	
AR	graph vertex to represent an action region	
OSM_POINTS	demo high detail point data	
VML_POINTS	demo mid-detail point data	
BOROUGH_TEXT	demo low-detail point data	

Figure 2: data model for the demonstration graph

```
[11]: %%html <img src="img/fig_2.png", width=1000, height=200>
```

<IPython.core.display.HTML object>

Update wkt string properties on graph vertices by matching on id and setting a geometry property based on a reference file for the demo.

Add vertices to the spatial index

```
[13]: # ONLY TO BE RUN ONCE
graph_object.add_nodes_to_spatial_layer()
```

Create action region subgraphs.

Although the approach calls for both action regions and path regions to be stored subgraphs of features, only action regions are created here for demonstration. These spatial regions form around the underlying network topology. In the example, an action region forms around a *k*-level routing node and is constructed using the methods below. Path regions are not included in the demo but follow the same overall approach, only forming around segments as opposed to routing nodes. As shown in the data model figure above, this means that features from multiple levels

of detail can be returned by paths either flowing through AR vertices, or through SK vertices, or both.

Figure 3: disambiguation of active action region subgraphs in the first phase of the example journey

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```
# ONLY TO BE RUN ONCE

#create action region subgraphs
action_region_reference = graph_object.get_action_regions_locations()

for rec in action_region_reference:
    action_region_target_features = graph_object.
    action_region_spatial_search(rec[0], rec[1], rec[2])
    #write the new edges to the database
    for edge_object in action_region_target_features['ar_feature_edge_list']:
        #pass in source ID and target ID to the write transaction
        graph_object.
        create_action_region_subgraphs(edge_object['ar_source_id'],___
        edge_object['feature_target_id'])
```

The graph should now have:

```
201,187 vertices
201,490 edges
```

1.0.3 3. Return a subgraph based on the routing result

The routing result is the labelled list of traversed routing nodes, assumed to have been returned by a routing engine based on an initial *O-D* query.

```
id = nested_data['id']
    routing_result_array.append(id)

# query the graph, matching on ID to get the WKT strings for each node in the_
    result

for traversed_node in routing_result_data['result']['nk_routing_nodes']:

# get the id and pass as argument to a query on the graph
    id = traversed_node['id']

# match on the ID and return the wkt property
    wkt_geometry = graph_object.get_wkt(id)

# change the geometry property to the wkt string
    traversed_node['geometry'] = wkt_geometry

# print result:

# print(routing_result_data)

# pretty print

# print(json.dumps(routing_result_data, indent=4, sort_keys=True))
```

Pass the routing result as argument to the pattern matching query and return the example subgraph.

1.0.4 4. Return features by phase region using the spatial index

In the figure below we see the main test route across the City of Edinburgh that was used in the empirical research. Here we see three classes of spatial region that are used as a basis for returning sets of features. The path regions and action regions that form around the routing network, and the bounding boxes of the phase regions determined by the current journey context. In the example use-case, phase regions are determined by bounding routing nodes that represent a transfer from one transport mode to another.

Figure 4: overview of the journey extent and the five phase regions in the example journey context

```
[11]: | %/html | <img src="img/fig_4.png", width=1000, height=200>
```

<IPython.core.display.HTML object>

```
[12]: # get phase region coordinates ready for spatial queries
     phase region bounding routing nodes = []
     # add the network node connected to the journey origin
     phase_region_bounding_routing_nodes.
      →append(routing_result_data['result']['nk_routing_nodes'][0])
     for r in routing_result_data['result']['nk_routing_nodes']:
         t = r['type']
         if (t=='transfer'):
             phase_region_bounding_routing_nodes.append(r)
     # add the network node connected to the journey destination
     y = len(routing_result_data['result']['nk_routing_nodes'])
     y = y - 1
     phase_region_bounding_routing_nodes.
      →append(routing_result_data['result']['nk_routing_nodes'][y])
     phase_regions = []
     for n in range(len(phase_region_bounding_routing_nodes)-1):
         phase_regions.append([phase_region_bounding_routing_nodes[n],_
      →phase_region_bounding_routing_nodes[n+1]])
     # print result:
     # print(phase_regions)
     # pretty print
     # print(json.dumps(phase_regions, indent=4, sort_keys=True))
```

Use the bounding box of each phase region as the basis for a query on the spatial index. Display results as the count of features returned in each region.

```
[13]: # uncomment lines in this cell to output to json for visualisation
# selection_data = {}
# selection_data['regions'] = {}

num_of_regions = len(phase_regions)

#return features for the journey extent (phase 0/ tile 0) using 'BOROUGH_TEXT'usas the example
#...low detail feature type
reference_num = num_of_regions - 1
# 'p_0' -> phase 0, i.e. the current journey extent
p_zero_vec_one = get_coords(phase_regions[0][0]['geometry'])
p_zero_vec_two = get_coords(phase_regions[reference_num][1]['geometry'])
p_zero_g_matrix = [[p_zero_vec_one[0], p_zero_vec_one[1]], [p_zero_vec_two[0], using 'BOROUGH_TEXT'using 'BOROU
```

```
p_zero_vecs = get_vectors_from_wkt(p_zero_g_matrix)
p_zero_e_dist = euclidean_distance(p_zero_vecs[0][0], p_zero_vecs[0][1])
p_zero_mid = midpoint(p_zero_vecs[0][0], p_zero_vecs[0][1])
#'vw' -> vectors 'v' and 'w'
p_zero_vw = get_region_bbox(p_zero_e_dist, p_zero_mid)
p_zero_selection = graph_object.phase_zero_spatial_query(p_zero_vw)
count_of_p_zero_features = len(p_zero_selection)
print("phase region 0:",count_of_p_zero_features,"features")
# selection data['regions']['region p zero'] = []
# selection_data['regions']['region_p_zero'].append({'selection':
 →p zero selection})
# now run spatial search for the rest of the phase regions
for r in range(num_of_regions):
    vec one = get coords(phase regions[r][0]['geometry'])
    vec_two = get_coords(phase_regions[r][1]['geometry'])
    g_matrix = [[vec_one[0], vec_one[1]],[vec_two[0], vec_two[1]]]
    vecs = get vectors from wkt(g matrix)
    e_dist = euclidean_distance(vecs[0][0], vecs[0][1])
    mid = midpoint(vecs[0][0], vecs[0][1])
    vw = get_region_bbox(e_dist, mid)
    selection = graph_object.phase_region_spatial_query(vw)
    count_of_features_in_region = len(selection)
    region_num = r + 1
    print("phase region", region num, ":", count_of_features_in_region, "features")
    # write region to dict
     region_string = str(region_num)
      region name = "region " + region string
      selection_data['regions'][region_name] = []
      selection_data['regions'][region_name].append({'selection': selection})
# with open('phase_region_selection.json'.format(n), 'w') as outfile:
      json.dump(selection_data, outfile)
phase region 0: 7 features
```

```
phase region 1: 16 features
phase region 2: 117 features
phase region 3: 2 features
phase region 4: 264 features
```

1.0.5 5. Construct a causal net instance and run variable activation over the net via message propagation

Return the journey context in the form of propagation matrices for each *k*-level routing node.

```
[14]: context = get_context(routing_result_data)

#print result:
# print(context)

#pretty print:
# print(json.dumps(context, indent=4, sort_keys=True))
```

Construct the *CN* by building a list of Variable objects and a list of Arc objects from the Vertices and Edges in the subgraph we returned via pattern matching.

```
[15]: ''' Construct a CN '''
     feature_selection = feature_view_template()
     arcs = construct_arcs(data)
     variables = construct_variables(data)
     print("arcs: ", len(arcs))
     print("variables: " , len(variables))
     # get vertex indexes
     for i in range(len(arcs)):
         arcs[i].get_parent_index(variables)
         arcs[i].get_child_index(variables)
     for v in variables:
         v.get_out_arcs(arcs)
         if v.variable_type!='feature':
             v_id = v.vertex_object['id']
             v_type = v.variable_type
             feature = { 'id': v_id, 'type': v_type }
             feature_selection['features'].append(feature)
         if v.variable_type=='feature':
             v_id = v.vertex_object['id']
             v_geometry = v.vertex_object['geometry'] #['wkt']
             v_type = v.variable_type
             feature = { 'id': v_id, 'geometry': v_geometry, 'type': v_type }
             feature_selection['features'].append(feature)
     # print result:
```

```
# print(feature_selection)

#pretty print:
# print(json.dumps(feature_selection, indent=4, sort_keys=True))
```

arcs: 425 variables: 341

Run variable activation by recursively propagating context over the net, starting at each *k*-level routing node.

This process is equivalent to determining the selection of features across mulit-scale view space as a probability distribution, where the probability of a feature persisting at given view being determined by the incoming messages from its parent vertices in the net.

Here 'p_matrix' refers to the propagation matrix that expresses the findings on the *k*-level routing nodes for each conceptual scale. A propagation matrix encodes a pattern of activation over the net.

The output of this process is an index of features selected in the current journey context, with index values referenced at each conceptual scale, thereby determining the set of possible views across the overall view space.

```
newly activated variable id: 86028
newly activated variable type: nk
newly activated variable out arcs:
                                   [1, 64]
finding: [1, 0, 0, 0]
[1]
arc:
    1
variable: 1
variable: 46
activated variable: 86028
activated variable: 77314
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs: [115, 116]
finding: [1, 0, 0, 0]
Π
count of activated variables: 0
```

```
newly activated variable id: 86028
newly activated variable type: nk
newly activated variable out arcs:
                                   [1, 64]
finding: [1, 0, 0, 0]
[1]
arc: 1
variable: 1
variable: 46
activated variable: 86028
activated variable: 77314
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs:
                                    [115, 116]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 86028
newly activated variable type: nk
newly activated variable out arcs:
                                   [1, 64]
finding: [1, 0, 0, 0]
[1]
arc: 1
variable: 1
variable: 46
activated variable: 86028
activated variable: 77314
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs:
                                   [115, 116]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 86028
newly activated variable type: nk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
[1]
arc: 1
variable: 1
variable: 46
activated variable: 86028
activated variable: 77314
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs:
                                   [115, 116]
finding: [1, 0, 0, 0]
count of activated variables: 0
```

```
newly activated variable id: 86028
newly activated variable type: nk
newly activated variable out arcs:
                                   [1, 64]
finding: [1, 1, 1, 1]
[1, 64]
arc: 1
variable:
variable: 46
arc: 64
variable:
variable: 77
activated variable: 86028
activated variable: 77314
activated variable: 86028
activated variable: 45416
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs:
                                   [115, 116]
finding: [1, 1, 1, 1]
[115, 116]
arc: 115
variable: 46
variable: 116
arc: 116
variable: 46
variable: 117
activated variable: 77314
activated variable: 98733
activated variable:
                    77314
activated variable: 57680
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs:
                                   [115, 116]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 98733
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs:
                                   [115, 116]
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 57680
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 45416
newly activated variable type: ar
newly activated variable out arcs: [166, 167, 168, 169, 170, 171]
finding: [1, 1, 1, 1]
[166, 167, 168, 169, 170, 171]
arc: 166
variable:
          77
variable:
          166
arc: 167
variable:
variable:
          167
arc: 168
variable:
          77
arc: 169
variable:
          77
variable:
          168
arc: 170
variable:
          77
variable: 169
arc: 171
variable:
         77
variable: 170
activated variable: 45416
activated variable: 5482862324
activated variable: 45416
activated variable: 299051396
activated variable: 45416
activated variable: 45416
activated variable: 2098234134
activated variable: 45416
activated variable: 3090387972
activated variable: 45416
activated variable: 283043744
newly activated variable id: 45416
newly activated variable type: ar
newly activated variable out arcs: [166, 167, 168, 169, 170, 171]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 5482862324
newly activated variable type: feature
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 45416
newly activated variable type: ar
newly activated variable out arcs:
                                   [166, 167, 168, 169, 170, 171]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 299051396
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 45416
newly activated variable type: ar
                                    [166, 167, 168, 169, 170, 171]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 45416
newly activated variable type: ar
newly activated variable out arcs:
                                    [166, 167, 168, 169, 170, 171]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2098234134
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 45416
newly activated variable type: ar
newly activated variable out arcs:
                                    [166, 167, 168, 169, 170, 171]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 3090387972
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 45416
newly activated variable type: ar
newly activated variable out arcs:
                                   [166, 167, 168, 169, 170, 171]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 283043744
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 91250
newly activated variable type: nk
newly activated variable out arcs:
                                   [2, 3, 65]
finding: [1, 0, 0, 0]
[2, 3]
arc: 2
variable: 2
variable: 46
arc: 3
variable: 2
variable: 47
activated variable: 91250
activated variable: 77314
activated variable: 91250
activated variable: 27950
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs:
                                    [115, 116]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs:
                                    [117, 118, 119]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 91250
newly activated variable type: nk
newly activated variable out arcs: [2, 3, 65]
finding: [1, 0, 0, 0]
[2, 3]
arc: 2
variable: 2
variable: 46
arc: 3
variable:
variable: 47
activated variable: 91250
```

```
activated variable:
                    77314
activated variable: 91250
activated variable: 27950
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs: [115, 116]
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs:
                                   [117, 118, 119]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 91250
newly activated variable type: nk
newly activated variable out arcs:
                                   [2, 3, 65]
finding: [1, 0, 0, 0]
[2, 3]
arc: 2
variable: 2
variable: 46
arc: 3
variable: 2
variable: 47
activated variable: 91250
activated variable: 77314
activated variable: 91250
activated variable: 27950
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs:
                                   [115, 116]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs: [117, 118, 119]
finding: [1, 0, 0, 0]
Π
count of activated variables: 0
newly activated variable id: 91250
newly activated variable type: nk
newly activated variable out arcs: [2, 3, 65]
         [1, 1, 1, 1]
finding:
[2, 3, 65]
arc: 2
```

```
variable:
variable: 46
arc: 3
variable:
variable: 47
arc: 65
variable: 2
variable: 78
activated variable: 91250
activated variable: 77314
activated variable: 91250
activated variable: 27950
activated variable: 91250
activated variable: 88984
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs:
                                   [115, 116]
finding: [1, 1, 1, 1]
[115, 116]
arc: 115
variable:
          46
variable: 116
arc: 116
variable:
variable: 117
activated variable: 77314
activated variable: 98733
activated variable: 77314
activated variable: 57680
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs:
                                   [115, 116]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 98733
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs:
                                   [115, 116]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 57680
```

```
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs:
                                   [117, 118, 119]
finding: [1, 1, 1, 1]
[117, 118, 119]
arc: 117
variable:
          47
variable:
          118
arc: 118
variable:
variable: 119
arc: 119
variable: 47
variable: 120
activated variable: 27950
activated variable: 40424
activated variable:
                    27950
activated variable: 66090
activated variable: 27950
activated variable: 42856
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs: [117, 118, 119]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 40424
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs: [117, 118, 119]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66090
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs:
                                   [117, 118, 119]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 42856
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 88984
newly activated variable type: ar
newly activated variable out arcs:
                                   finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 91250
newly activated variable type: nk
newly activated variable out arcs:
                                   [2, 3, 65]
finding: [1, 1, 1, 1]
[2, 3, 65]
arc: 2
variable: 2
variable: 46
arc: 3
variable: 2
variable: 47
arc: 65
variable: 2
variable: 78
activated variable: 91250
activated variable: 77314
activated variable: 91250
activated variable: 27950
activated variable: 91250
activated variable: 88984
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs: [115, 116]
finding: [1, 1, 1, 1]
[115, 116]
arc: 115
variable:
variable:
         116
arc: 116
```

```
variable: 46
variable: 117
activated variable: 77314
activated variable: 98733
activated variable: 77314
activated variable: 57680
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs: [115, 116]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 98733
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 77314
newly activated variable type: sk
newly activated variable out arcs:
                                   [115, 116]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 57680
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs:
                                   [117, 118, 119]
finding: [1, 1, 1, 1]
[117, 118, 119]
arc: 117
variable: 47
variable:
arc: 118
variable: 47
variable: 119
arc: 119
variable: 47
variable: 120
activated variable:
                    27950
activated variable: 40424
activated variable:
                    27950
activated variable: 66090
```

```
activated variable: 27950
activated variable: 42856
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs:
                                   [117, 118, 119]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 40424
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs: [117, 118, 119]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 66090
newly activated variable type: sk minus one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs:
                                   [117, 118, 119]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 42856
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 88984
newly activated variable type: ar
newly activated variable out arcs:
                                    finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 62583
newly activated variable type: nk
newly activated variable out arcs:
                                   [4, 5, 66]
finding: [1, 0, 0, 0]
```

```
[4, 5]
arc: 4
variable: 3
variable: 48
arc: 5
variable: 3
variable: 47
activated variable: 62583
activated variable: 85784
activated variable: 62583
activated variable: 27950
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs: [117, 118, 119]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 62583
newly activated variable type: nk
newly activated variable out arcs:
                                   [4, 5, 66]
finding: [1, 0, 0, 0]
[4, 5]
arc: 4
variable: 3
variable: 48
arc: 5
variable: 3
variable: 47
activated variable: 62583
activated variable: 85784
activated variable: 62583
activated variable: 27950
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs:
                                   [117, 118, 119]
finding: [1, 0, 0, 0]
```

```
Π
count of activated variables: 0
newly activated variable id: 62583
newly activated variable type: nk
newly activated variable out arcs:
                                   [4, 5, 66]
finding: [1, 0, 0, 0]
[4, 5]
arc: 4
variable: 3
variable: 48
arc: 5
variable: 3
variable: 47
activated variable: 62583
activated variable:
                    85784
activated variable: 62583
activated variable: 27950
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs: [120, 121]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs: [117, 118, 119]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 62583
newly activated variable type: nk
newly activated variable out arcs: [4, 5, 66]
finding: [1, 1, 1, 1]
[4, 5, 66]
arc: 4
variable: 3
variable: 48
arc: 5
variable: 3
variable: 47
arc: 66
variable:
variable: 79
activated variable: 62583
activated variable:
                    85784
activated variable:
                    62583
activated variable:
                    27950
activated variable: 62583
```

```
activated variable: 11132
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
finding: [1, 1, 1, 1]
[120, 121]
arc: 120
variable: 48
variable: 121
arc: 121
variable: 48
variable: 122
activated variable: 85784
activated variable: 60393
activated variable:
                    85784
activated variable: 14091
newly activated variable id: 85784
newly activated variable type: sk
                                   [120, 121]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 60393
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 14091
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs:
                                   [117, 118, 119]
finding: [1, 1, 1, 1]
[117, 118, 119]
arc: 117
variable: 47
variable: 118
```

```
arc: 118
variable: 47
variable:
         119
arc: 119
variable: 47
variable: 120
activated variable: 27950
activated variable: 40424
activated variable: 27950
activated variable: 66090
activated variable: 27950
activated variable: 42856
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs:
                                   [117, 118, 119]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 40424
newly activated variable type: sk minus one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs:
                                   [117, 118, 119]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66090
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs: [117, 118, 119]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 42856
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs: [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
[172, 173, 174, 175, 176, 177, 178, 179, 180, 181]
variable: 79
variable: 171
arc: 173
         79
variable:
variable:
          172
arc: 174
          79
variable:
variable:
          173
arc: 175
variable:
          79
variable:
         174
arc: 176
variable:
          79
variable:
          175
arc: 177
variable:
          79
arc: 178
variable:
         79
variable:
          176
arc: 179
variable:
          79
variable:
          177
arc: 180
variable:
          79
variable:
         178
arc: 181
variable: 79
variable: 179
activated variable: 11132
activated variable: 2967432121
activated variable: 11132
activated variable: 2967432122
activated variable: 11132
activated variable: 2967602849
activated variable: 11132
activated variable: 6516126497
activated variable: 11132
activated variable: 2967602834
activated variable: 11132
activated variable: 11132
activated variable: 2967602850
```

```
activated variable: 11132
activated variable: 2967602848
activated variable: 11132
activated variable: 2962666141
activated variable: 11132
activated variable: 4207310041
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs: [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2967432121
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                   [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2967432122
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                   [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967602849
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs: [172, 173, 174, 175, 176, 177, 178, 179,
```

```
180, 181]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 6516126497
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                    [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2967602834
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                    [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                    [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2967602850
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                   [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 2967602848
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                   [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2962666141
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                   [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4207310041
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 62583
newly activated variable type: nk
newly activated variable out arcs: [4, 5, 66]
finding:
         [1, 1, 1, 1]
[4, 5, 66]
arc: 4
variable: 3
variable: 48
arc: 5
variable:
variable:
arc: 66
variable:
variable: 79
```

```
activated variable: 62583
activated variable: 85784
activated variable: 62583
activated variable: 27950
activated variable: 62583
activated variable: 11132
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
finding: [1, 1, 1, 1]
[120, 121]
arc: 120
variable: 48
variable: 121
arc: 121
variable: 48
variable: 122
activated variable: 85784
activated variable: 60393
activated variable: 85784
activated variable: 14091
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 60393
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 14091
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs: [117, 118, 119]
```

```
finding: [1, 1, 1, 1]
[117, 118, 119]
arc: 117
variable:
          47
variable: 118
arc: 118
variable: 47
variable: 119
arc: 119
variable:
          47
variable: 120
activated variable: 27950
activated variable: 40424
activated variable: 27950
activated variable:
                    66090
activated variable: 27950
activated variable: 42856
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs: [117, 118, 119]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 40424
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs:
                                   [117, 118, 119]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66090
newly activated variable type: sk minus one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 27950
newly activated variable type: sk
newly activated variable out arcs:
                                    [117, 118, 119]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 42856
```

```
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                   [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding:
         [1, 1, 1, 1]
[172, 173, 174, 175, 176, 177, 178, 179, 180, 181]
arc: 172
variable:
          79
variable:
          171
arc: 173
variable:
          79
variable:
          172
arc: 174
variable:
          79
variable:
          173
arc: 175
          79
variable:
variable:
          174
arc: 176
variable:
          79
variable:
          175
arc: 177
variable:
          79
arc: 178
variable:
variable:
          176
arc: 179
variable:
          79
variable:
          177
arc: 180
variable:
          79
variable:
          178
arc: 181
variable:
          79
variable: 179
activated variable: 11132
activated variable: 2967432121
activated variable:
                     11132
activated variable: 2967432122
activated variable:
                    11132
activated variable: 2967602849
activated variable: 11132
activated variable: 6516126497
```

```
activated variable:
                    11132
activated variable: 2967602834
activated variable: 11132
activated variable: 11132
activated variable: 2967602850
activated variable: 11132
activated variable: 2967602848
activated variable: 11132
activated variable: 2962666141
activated variable: 11132
activated variable: 4207310041
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                   [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967432121
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                   [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2967432122
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs: [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967602849
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                    [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 6516126497
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                   [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967602834
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs: [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                   [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967602850
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs: [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967602848
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                    [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 2962666141
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 11132
newly activated variable type: ar
newly activated variable out arcs:
                                    [172, 173, 174, 175, 176, 177, 178, 179,
180, 181]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4207310041
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 92903
newly activated variable type: nk
newly activated variable out arcs: [6, 7, 67]
finding: [1, 0, 0, 0]
[6, 7]
arc:
    6
variable: 4
variable: 49
arc: 7
```

```
variable: 4
variable: 48
activated variable: 92903
activated variable:
                    48610
activated variable: 92903
activated variable: 85784
newly activated variable id: 48610
newly activated variable type: sk
newly activated variable out arcs:
                                   [122]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 92903
newly activated variable type: nk
newly activated variable out arcs:
                                   [6, 7, 67]
finding: [1, 0, 0, 0]
[6, 7]
arc: 6
variable: 4
variable: 49
arc: 7
variable: 4
variable: 48
activated variable: 92903
activated variable: 48610
activated variable: 92903
activated variable: 85784
newly activated variable id: 48610
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 92903
newly activated variable type: nk
newly activated variable out arcs:
                                   [6, 7, 67]
```

```
finding: [1, 0, 0, 0]
[6, 7]
arc: 6
variable: 4
variable: 49
arc: 7
variable: 4
variable: 48
activated variable: 92903
activated variable: 48610
activated variable: 92903
activated variable: 85784
newly activated variable id: 48610
newly activated variable type: sk
newly activated variable out arcs:
                                   [122]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 92903
newly activated variable type: nk
newly activated variable out arcs:
                                   [6, 7, 67]
finding: [1, 0, 0, 0]
[6, 7]
arc: 6
variable:
variable: 49
arc: 7
variable: 4
variable: 48
activated variable: 92903
activated variable: 48610
activated variable: 92903
activated variable: 85784
newly activated variable id: 48610
newly activated variable type: sk
newly activated variable out arcs:
                                   [122]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
```

```
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 92903
newly activated variable type: nk
newly activated variable out arcs: [6, 7, 67]
finding: [1, 1, 1, 1]
[6, 7, 67]
arc: 6
variable:
variable: 49
arc: 7
variable:
variable: 48
arc: 67
variable:
variable: 80
activated variable: 92903
activated variable: 48610
activated variable: 92903
activated variable: 85784
activated variable: 92903
activated variable: 75379
newly activated variable id: 48610
newly activated variable type: sk
newly activated variable out arcs:
                                   [122]
finding: [1, 1, 1, 1]
[122]
arc: 122
variable: 49
variable: 123
activated variable: 48610
activated variable: 78869
newly activated variable id: 48610
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 78869
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
```

```
finding: [1, 1, 1, 1]
[120, 121]
arc: 120
variable:
          48
variable: 121
arc: 121
variable: 48
variable: 122
activated variable: 85784
activated variable: 60393
activated variable: 85784
activated variable: 14091
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 60393
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 85784
newly activated variable type: sk
newly activated variable out arcs:
                                   [120, 121]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 14091
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs: [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
[182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194]
arc: 182
variable: 80
variable:
          180
arc: 183
variable: 80
variable: 181
```

arc: 184 variable: 80 arc: 185 variable: 80 variable: 182 arc: 186 variable: 80 variable: 183 arc: 187 variable: 80 arc: 188 variable: 80 variable: 184 arc: 189 variable: 80 variable: 185 arc: 190 variable: 80 variable: 186 arc: 191 variable: 80 variable: 187 arc: 192 variable: 80 variable: 188 arc: 193 variable: 80 variable: 189 arc: 194 variable: 80 variable: 190 activated variable: 75379 activated variable: 2965815736 activated variable: 75379 activated variable: 2967602853 activated variable: 75379 activated variable: 75379 activated variable: 2967602842 activated variable: 75379 activated variable: 2967477634 activated variable: 75379 activated variable: 75379 activated variable: 2967432116

activated variable:

activated variable:

activated variable:

activated variable:

activated variable: 75379

75379

75379

2958781862

2967602839

39

```
activated variable: 2326499383
activated variable: 75379
activated variable: 2967432117
activated variable: 75379
activated variable: 2967602837
activated variable: 75379
activated variable: 2967602838
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs:
                                   [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2965815736
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs:
                                   [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2967602853
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs:
                                   [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs:
                                   [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967602842
```

```
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs:
                                   [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967477634
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs:
                                    [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs:
                                   [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2967432116
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs:
                                   [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2958781862
newly activated variable type: feature
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs:
                                   [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967602839
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs:
                                    [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2326499383
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs:
                                    [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967432117
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs: [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 2967602837
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 75379
newly activated variable type: ar
newly activated variable out arcs:
                                    [182, 183, 184, 185, 186, 187, 188, 189,
190, 191, 192, 193, 194]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967602838
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 61060
newly activated variable type: nk
                                   [8, 9, 68]
newly activated variable out arcs:
finding: [1, 0, 0, 0]
[8, 9]
arc: 8
variable: 5
variable: 50
arc: 9
variable: 5
variable: 49
activated variable: 61060
activated variable: 52597
activated variable: 61060
activated variable: 48610
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                    [123, 124]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 48610
newly activated variable type: sk
newly activated variable out arcs:
                                    [122]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 61060
```

```
newly activated variable type: nk
newly activated variable out arcs:
                                   [8, 9, 68]
finding: [1, 0, 0, 0]
[8, 9]
arc: 8
variable: 5
variable: 50
arc: 9
variable: 5
variable:
activated variable: 61060
activated variable: 52597
activated variable:
                    61060
activated variable: 48610
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                   [123, 124]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 48610
newly activated variable type: sk
newly activated variable out arcs:
                                   [122]
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 61060
newly activated variable type: nk
newly activated variable out arcs:
                                   [8, 9, 68]
finding: [1, 0, 0, 0]
[8, 9]
arc: 8
variable: 5
variable: 50
arc: 9
variable: 5
variable: 49
activated variable: 61060
activated variable: 52597
activated variable: 61060
activated variable: 48610
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                   [123, 124]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 48610
```

```
newly activated variable type: sk
newly activated variable out arcs:
                                   [122]
finding: [1, 0, 0, 0]
Π
count of activated variables: 0
newly activated variable id: 61060
newly activated variable type: nk
newly activated variable out arcs:
                                    [8, 9, 68]
finding: [1, 1, 1, 1]
[8, 9, 68]
arc: 8
variable:
variable: 50
arc: 9
variable:
variable:
arc: 68
variable: 5
variable: 81
activated variable: 61060
activated variable: 52597
activated variable: 61060
activated variable: 48610
activated variable: 61060
activated variable: 63704
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                   [123, 124]
finding:
         [1, 1, 1, 1]
[123, 124]
arc: 123
variable:
          50
variable:
          124
arc: 124
variable:
         50
variable: 125
activated variable: 52597
activated variable: 73691
activated variable: 52597
activated variable: 44976
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                   [123, 124]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 73691
newly activated variable type: sk_minus_one
```

```
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                    [123, 124]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 44976
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 48610
newly activated variable type: sk
newly activated variable out arcs:
                                    [122]
finding: [1, 1, 1, 1]
[122]
arc: 122
variable: 49
variable: 123
activated variable: 48610
activated variable: 78869
newly activated variable id: 48610
newly activated variable type: sk
newly activated variable out arcs:
                                    [122]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 78869
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                   [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
[195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205]
arc: 195
variable:
          81
variable:
          191
arc: 196
```

variable: 81 variable: 190 arc: 197 variable: 81 variable: 189 arc: 198 variable: 81 variable: 185 arc: 199 variable: 81 variable: 183 arc: 200 variable: 81 arc: 201 variable: 81 variable: 192 arc: 202 variable: 81 arc: 203 variable: 81 variable: 188 arc: 204 variable: 81 variable: 193 arc: 205 variable: 81 variable: 184 activated variable: 63704 activated variable: 2958781867 activated variable: 63704 activated variable: 2967602838 activated variable: 63704 activated variable: 2967602837 activated variable: 63704 activated variable: 2958781862 activated variable: 63704 activated variable: 2967477634 activated variable: 63704 activated variable: 63704 activated variable: 2967477637 activated variable: 63704 activated variable: 63704 activated variable: 2967432117

activated variable: 63704

activated variable: 63704 activated variable: 2967432116 newly activated variable id: 63704

2967432115

activated variable:

```
newly activated variable type: ar
newly activated variable out arcs:
                                   [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2958781867
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                   [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967602838
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs: [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967602837
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                   [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2958781862
newly activated variable type: feature
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs: [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967477634
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                    [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                   [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967477637
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs: [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                    [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 2967432117
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                   [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967432115
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                   [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967432116
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 61060
newly activated variable type: nk
newly activated variable out arcs:
                                   [8, 9, 68]
finding:
         [1, 1, 1, 1]
[8, 9, 68]
arc: 8
variable: 5
variable: 50
arc: 9
variable:
variable:
          49
arc: 68
variable: 5
variable: 81
```

```
activated variable: 61060
activated variable: 52597
activated variable: 61060
activated variable: 48610
activated variable: 61060
activated variable: 63704
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                   [123, 124]
finding: [1, 1, 1, 1]
[123, 124]
arc: 123
variable: 50
variable: 124
arc: 124
variable: 50
variable: 125
activated variable: 52597
activated variable: 73691
activated variable: 52597
activated variable: 44976
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                   [123, 124]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 73691
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                   [123, 124]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 44976
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 48610
newly activated variable type: sk
newly activated variable out arcs:
                                   [122]
```

```
finding: [1, 1, 1, 1]
[122]
arc: 122
variable: 49
variable: 123
activated variable: 48610
activated variable: 78869
newly activated variable id: 48610
newly activated variable type: sk
newly activated variable out arcs:
                                   [122]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 78869
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                   [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
[195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205]
arc: 195
variable:
          81
variable:
          191
arc: 196
variable:
variable:
          190
arc: 197
variable:
          81
variable:
          189
arc: 198
variable: 81
variable:
          185
arc: 199
variable: 81
variable:
          183
arc: 200
variable:
          81
arc: 201
variable:
          81
variable:
          192
arc: 202
variable:
          81
arc: 203
```

```
variable:
          81
variable: 188
arc: 204
variable: 81
variable: 193
arc: 205
variable: 81
variable: 184
activated variable: 63704
activated variable: 2958781867
activated variable:
                    63704
activated variable:
                    2967602838
activated variable:
                    63704
activated variable: 2967602837
activated variable:
                    63704
activated variable: 2958781862
activated variable: 63704
activated variable: 2967477634
activated variable: 63704
activated variable: 63704
activated variable: 2967477637
activated variable: 63704
activated variable: 63704
activated variable: 2967432117
activated variable: 63704
activated variable: 2967432115
activated variable: 63704
activated variable: 2967432116
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs: [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2958781867
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                   [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 2967602838
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs: [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2967602837
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                   [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2958781862
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                    [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967477634
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs: [195, 196, 197, 198, 199, 200, 201, 202,
```

```
203, 204, 205]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                    [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2967477637
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs: [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                    [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2967432117
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs: [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967432115
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 63704
newly activated variable type: ar
newly activated variable out arcs:
                                    [195, 196, 197, 198, 199, 200, 201, 202,
203, 204, 205]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2967432116
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 84107
newly activated variable type: nk
newly activated variable out arcs:
                                   [10, 11, 69]
finding: [1, 0, 0, 0]
[10, 11]
arc: 10
variable: 6
variable: 50
arc: 11
variable: 6
variable: 51
activated variable: 84107
activated variable: 52597
activated variable: 84107
activated variable: 81551
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                    [123, 124]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs: [125, 126, 127]
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 84107
newly activated variable type: nk
newly activated variable out arcs: [10, 11, 69]
finding:
         [1, 0, 0, 0]
[10, 11]
arc: 10
```

```
variable:
variable: 50
arc: 11
variable: 6
variable: 51
activated variable: 84107
activated variable: 52597
activated variable: 84107
activated variable: 81551
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                   [123, 124]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                   [125, 126, 127]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 84107
newly activated variable type: nk
newly activated variable out arcs:
                                   [10, 11, 69]
finding: [1, 0, 0, 0]
[10, 11]
arc: 10
variable:
variable: 50
arc: 11
variable:
variable: 51
activated variable: 84107
activated variable: 52597
activated variable: 84107
activated variable: 81551
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs: [123, 124]
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs: [125, 126, 127]
finding: [1, 0, 0, 0]
count of activated variables: 0
```

```
newly activated variable id: 84107
newly activated variable type: nk
newly activated variable out arcs: [10, 11, 69]
finding: [1, 1, 1, 1]
[10, 11, 69]
arc: 10
variable: 6
variable: 50
arc: 11
variable:
variable: 51
arc: 69
variable:
variable: 82
activated variable: 84107
activated variable: 52597
activated variable: 84107
activated variable: 81551
activated variable: 84107
activated variable: 66122
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                   [123, 124]
finding: [1, 1, 1, 1]
[123, 124]
arc: 123
variable: 50
variable:
          124
arc: 124
variable: 50
variable: 125
activated variable: 52597
activated variable: 73691
activated variable: 52597
activated variable: 44976
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                   [123, 124]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 73691
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 52597
```

```
newly activated variable type: sk
newly activated variable out arcs:
                                   [123, 124]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 44976
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                   [125, 126, 127]
finding: [1, 1, 1, 1]
[125, 126, 127]
arc: 125
variable:
          51
variable:
          126
arc: 126
variable: 51
variable: 127
arc: 127
variable: 51
variable: 128
activated variable: 81551
activated variable: 91493
activated variable: 81551
activated variable:
                    71832
activated variable: 81551
activated variable: 22178
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs: [125, 126, 127]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 91493
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                   [125, 126, 127]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 71832
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                   [125, 126, 127]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 22178
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
[206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221,
222, 223, 224, 225, 226]
arc: 206
variable: 82
variable:
          194
arc: 207
variable:
variable:
          195
arc: 208
variable: 82
variable:
          196
arc: 209
variable: 82
variable:
          197
arc: 210
variable: 82
variable: 198
arc: 211
variable: 82
arc: 212
variable:
variable:
          199
arc: 213
variable: 82
```

variable: 200

arc: 214

variable: 82

arc: 215

variable: 82

variable: 201

arc: 216

variable: 82

variable: 202

arc: 217

variable: 82

variable: 203

arc: 218

variable: 82

arc: 219

variable: 82

variable: 204

arc: 220

variable: 82

arc: 221

variable: 82

variable: 205

arc: 222

variable: 82

variable: 206

arc: 223

variable: 82

variable: 207

arc: 224

variable: 82

arc: 225

variable: 82

variable: 208

arc: 226

variable: 82

variable: 209

activated variable: 66122

activated variable: 2977624488

activated variable: 66122

activated variable: 2958781623

activated variable: 66122

activated variable: 2966320836

activated variable: 66122

activated variable: 2977624483

activated variable: 66122

activated variable: 2977978100

activated variable: 66122

activated variable: 66122

```
activated variable:
                    2977978076
activated variable: 66122
activated variable: 6256675776
activated variable: 66122
activated variable: 66122
activated variable: 2975527515
activated variable: 66122
activated variable: 2977624481
activated variable: 66122
activated variable: 2461793343
activated variable: 66122
activated variable: 66122
activated variable:
                    2977978077
activated variable: 66122
activated variable:
                    66122
activated variable: 597685536
activated variable: 66122
activated variable: 2866842704
activated variable: 66122
activated variable: 597685537
activated variable: 66122
activated variable: 66122
activated variable: 2977978079
activated variable: 66122
activated variable: 2977978078
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2977624488
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2958781623
newly activated variable type: feature
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2966320836
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2977624483
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2977978100
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2977978076
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 6256675776
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2975527515
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
```

```
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2977624481
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2461793343
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2977978077
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
```

```
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 597685536
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2866842704
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 597685537
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2977978079
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2977978078
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 84107
newly activated variable type: nk
newly activated variable out arcs: [10, 11, 69]
finding: [1, 1, 1, 1]
[10, 11, 69]
arc: 10
variable: 6
variable: 50
arc: 11
variable:
variable: 51
arc: 69
variable: 6
variable: 82
activated variable: 84107
activated variable: 52597
activated variable: 84107
activated variable: 81551
activated variable: 84107
activated variable: 66122
```

```
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                   [123, 124]
finding: [1, 1, 1, 1]
[123, 124]
arc: 123
variable:
          50
variable: 124
arc: 124
variable: 50
variable: 125
activated variable: 52597
activated variable: 73691
activated variable: 52597
activated variable: 44976
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                   [123, 124]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 73691
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 52597
newly activated variable type: sk
newly activated variable out arcs:
                                    [123, 124]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 44976
newly activated variable type: sk minus one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                   [125, 126, 127]
finding: [1, 1, 1, 1]
[125, 126, 127]
arc: 125
variable:
         51
variable:
         126
arc: 126
```

```
variable: 51
variable: 127
arc: 127
variable: 51
variable: 128
activated variable: 81551
activated variable: 91493
activated variable: 81551
activated variable: 71832
activated variable: 81551
activated variable: 22178
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                   [125, 126, 127]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 91493
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs: [125, 126, 127]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 71832
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                   [125, 126, 127]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 22178
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
```

```
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
[206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221,
222, 223, 224, 225, 226]
arc: 206
variable: 82
variable:
          194
arc: 207
variable:
          82
variable:
          195
arc: 208
variable:
          82
variable:
          196
arc: 209
variable:
          82
variable:
          197
arc: 210
variable:
          82
variable:
           198
arc: 211
variable:
          82
arc: 212
variable: 82
variable:
          199
arc: 213
variable:
          82
variable:
           200
arc: 214
variable:
          82
arc: 215
variable:
          82
variable:
           201
arc: 216
variable:
          82
variable:
          202
arc: 217
variable: 82
variable:
          203
arc: 218
variable:
          82
arc: 219
variable:
variable:
           204
arc: 220
variable:
          82
```

arc: 221

variable: 82 variable: 205 arc: 222 82 variable: variable: 206 arc: 223 variable: 82 variable: 207 arc: 224 variable: 82 arc: 225 variable: 82

variable: 208 arc: 226 variable: 82 variable: 209

activated variable: 66122 activated variable: 2977624488 activated variable: 66122

activated variable: 2958781623

activated variable: 66122

activated variable: 2966320836

activated variable: 66122

activated variable: 2977624483

activated variable: 66122

activated variable: 2977978100

activated variable: 66122 activated variable: 66122

activated variable: 2977978076

activated variable: 66122

activated variable: 6256675776

activated variable: 66122 activated variable: 66122

activated variable: 2975527515

activated variable: 66122

activated variable: 2977624481

activated variable: 66122

activated variable: 2461793343

activated variable: 66122 activated variable: 66122

activated variable: 2977978077

activated variable: 66122 activated variable: 66122

activated variable: 597685536 activated variable: 66122

activated variable: 66122

activated variable: 2866842704

activated variable: 66122 activated variable: 597685537

```
activated variable: 66122
activated variable: 66122
activated variable: 2977978079
activated variable: 66122
activated variable: 2977978078
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2977624488
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2958781623
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2966320836
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2977624483
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2977978100
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2977978076
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 6256675776
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs:
                                   [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2975527515
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2977624481
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2461793343
```

```
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2977978077
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 597685536
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
```

```
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2866842704
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs:
                                   [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 597685537
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2977978079
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66122
newly activated variable type: ar
newly activated variable out arcs: [206, 207, 208, 209, 210, 211, 212, 213,
214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226]
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 2977978078
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 33534
newly activated variable type: nk
newly activated variable out arcs: [12, 13, 70]
         [1, 0, 0, 0]
finding:
[12, 13]
arc: 12
variable:
variable: 52
arc: 13
variable: 7
variable: 51
activated variable: 33534
activated variable: 73364
activated variable: 33534
activated variable: 81551
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs: [128, 129, 130]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                   [125, 126, 127]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 33534
newly activated variable type: nk
newly activated variable out arcs:
                                   [12, 13, 70]
finding: [1, 0, 0, 0]
[12, 13]
arc: 12
variable:
variable: 52
arc: 13
variable:
variable: 51
activated variable: 33534
activated variable: 73364
```

```
activated variable:
                    33534
activated variable: 81551
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                   [125, 126, 127]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 33534
newly activated variable type: nk
newly activated variable out arcs: [12, 13, 70]
         [1, 0, 0, 0]
finding:
[12, 13]
arc: 12
variable: 7
variable: 52
arc: 13
variable: 7
variable: 51
activated variable: 33534
activated variable: 73364
activated variable: 33534
activated variable: 81551
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                   [125, 126, 127]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 33534
newly activated variable type: nk
newly activated variable out arcs:
                                    [12, 13, 70]
finding: [1, 1, 1, 1]
[12, 13, 70]
arc: 12
variable: 7
```

```
variable: 52
arc: 13
variable:
variable: 51
arc: 70
variable: 7
variable: 83
activated variable: 33534
activated variable: 73364
activated variable: 33534
activated variable: 81551
activated variable: 33534
activated variable: 47606
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 1, 1, 1]
[128, 129, 130]
arc: 128
variable: 52
variable:
          129
arc: 129
variable: 52
variable:
          130
arc: 130
variable: 52
variable: 131
activated variable: 73364
activated variable: 49836
activated variable: 73364
activated variable: 40855
activated variable: 73364
activated variable: 20862
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs: [128, 129, 130]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 49836
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 40855
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20862
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                   [125, 126, 127]
finding: [1, 1, 1, 1]
[125, 126, 127]
arc: 125
variable:
          51
variable:
          126
arc: 126
variable:
          51
variable:
          127
arc: 127
variable: 51
variable: 128
activated variable: 81551
activated variable: 91493
activated variable: 81551
activated variable: 71832
activated variable: 81551
activated variable: 22178
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                    [125, 126, 127]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 91493
```

```
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
                                   [125, 126, 127]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 71832
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs: [125, 126, 127]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 22178
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                   [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
[227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237]
arc: 227
variable: 83
variable:
          210
arc: 228
variable: 83
variable:
          211
arc: 229
variable:
          83
arc: 230
variable:
          83
variable:
          212
arc: 231
variable: 83
```

```
variable:
          213
arc: 232
variable:
          83
variable:
          214
arc: 233
variable:
          83
arc: 234
variable:
         83
variable:
          215
arc: 235
variable:
         83
variable:
          216
arc: 236
variable:
          83
arc: 237
variable:
variable:
         217
activated variable: 47606
activated variable: 2989775332
activated variable: 47606
activated variable: 502534739
activated variable: 47606
activated variable: 47606
activated variable: 2954633066
activated variable: 47606
activated variable: 2979318385
activated variable: 47606
activated variable: 760654831
activated variable: 47606
activated variable: 47606
activated variable: 730163709
activated variable: 47606
activated variable: 2979318373
activated variable: 47606
activated variable: 47606
activated variable: 2979318376
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs: [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2989775332
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                   [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 502534739
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs: [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
                                   [227, 228, 229, 230, 231, 232, 233, 234,
newly activated variable out arcs:
235, 236, 237]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2954633066
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs: [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2979318385
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
```

```
newly activated variable type: ar
newly activated variable out arcs:
                                   [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 760654831
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                   [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                   [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 730163709
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                   [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2979318373
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs: [227, 228, 229, 230, 231, 232, 233, 234,
```

```
235, 236, 237]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                   [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2979318376
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 33534
newly activated variable type: nk
newly activated variable out arcs: [12, 13, 70]
finding: [1, 1, 1, 1]
[12, 13, 70]
arc: 12
variable: 7
variable: 52
arc: 13
variable:
variable:
         51
arc: 70
variable: 7
variable: 83
activated variable: 33534
activated variable: 73364
activated variable: 33534
activated variable: 81551
activated variable: 33534
activated variable: 47606
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs: [128, 129, 130]
finding: [1, 1, 1, 1]
[128, 129, 130]
arc: 128
variable:
          52
variable:
          129
arc: 129
variable: 52
variable: 130
```

```
arc: 130
variable: 52
variable: 131
activated variable: 73364
activated variable: 49836
activated variable: 73364
activated variable: 40855
activated variable: 73364
activated variable: 20862
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 49836
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 40855
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20862
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                   [125, 126, 127]
```

```
finding: [1, 1, 1, 1]
[125, 126, 127]
arc: 125
variable:
          51
variable: 126
arc: 126
variable: 51
variable: 127
arc: 127
variable:
         51
variable: 128
activated variable: 81551
activated variable: 91493
activated variable: 81551
activated variable:
                    71832
activated variable: 81551
activated variable: 22178
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs: [125, 126, 127]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 91493
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                   [125, 126, 127]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 71832
newly activated variable type: sk minus one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 81551
newly activated variable type: sk
newly activated variable out arcs:
                                    [125, 126, 127]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 22178
```

```
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                   [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
[227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237]
arc: 227
variable:
          83
variable:
          210
arc: 228
variable:
          83
variable:
          211
arc: 229
variable:
          83
arc: 230
variable:
          83
          212
variable:
arc: 231
variable:
          83
variable:
          213
arc: 232
variable:
          83
variable:
          214
arc: 233
variable:
          83
arc: 234
variable:
          83
variable:
          215
arc: 235
variable:
          83
variable:
          216
arc: 236
variable:
          83
arc: 237
variable: 83
variable: 217
activated variable: 47606
activated variable:
                     2989775332
activated variable: 47606
activated variable: 502534739
activated variable: 47606
activated variable: 47606
activated variable: 2954633066
```

```
activated variable: 47606
activated variable: 2979318385
activated variable: 47606
activated variable: 760654831
activated variable: 47606
activated variable: 47606
activated variable: 730163709
activated variable: 47606
activated variable: 2979318373
activated variable: 47606
activated variable: 47606
activated variable: 2979318376
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                   [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2989775332
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                   [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 502534739
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                   [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                   [227, 228, 229, 230, 231, 232, 233, 234,
```

```
235, 236, 237]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2954633066
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                    [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2979318385
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                   [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 760654831
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs: [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                    [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 730163709
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                    [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2979318373
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs:
                                    [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 47606
newly activated variable type: ar
newly activated variable out arcs: [227, 228, 229, 230, 231, 232, 233, 234,
235, 236, 237]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2979318376
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 22278
newly activated variable type: nk
newly activated variable out arcs:
                                    [14, 15, 71]
finding: [1, 0, 0, 0]
[14, 15]
arc: 14
variable: 8
```

```
variable: 53
arc: 15
variable: 8
variable: 52
activated variable: 22278
activated variable: 41480
activated variable: 22278
activated variable: 73364
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                   [131, 132]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 22278
newly activated variable type: nk
                                   [14, 15, 71]
newly activated variable out arcs:
         [1, 0, 0, 0]
finding:
[14, 15]
arc: 14
variable: 8
variable: 53
arc: 15
variable:
variable: 52
activated variable: 22278
activated variable: 41480
activated variable: 22278
activated variable: 73364
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                   [131, 132]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 22278
```

```
newly activated variable type: nk
newly activated variable out arcs: [14, 15, 71]
finding: [1, 0, 0, 0]
[14, 15]
arc: 14
variable:
variable: 53
arc: 15
variable: 8
variable: 52
activated variable:
                    22278
activated variable: 41480
activated variable:
                    22278
activated variable: 73364
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                   [131, 132]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs: [128, 129, 130]
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 22278
newly activated variable type: nk
newly activated variable out arcs:
                                   [14, 15, 71]
finding: [1, 1, 1, 1]
[14, 15, 71]
arc: 14
variable: 8
variable: 53
arc: 15
variable: 8
variable: 52
arc: 71
variable: 8
variable: 84
activated variable: 22278
activated variable: 41480
activated variable:
                    22278
activated variable: 73364
activated variable:
                    22278
activated variable: 36617
newly activated variable id: 41480
newly activated variable type: sk
```

```
newly activated variable out arcs: [131, 132]
finding: [1, 1, 1, 1]
[131, 132]
arc: 131
variable: 53
variable:
          132
arc: 132
variable: 53
variable: 133
activated variable: 41480
activated variable: 76805
activated variable: 41480
activated variable: 81821
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                   [131, 132]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 76805
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                   [131, 132]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 81821
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs: [128, 129, 130]
finding: [1, 1, 1, 1]
[128, 129, 130]
arc: 128
variable:
          52
variable:
          129
arc: 129
variable: 52
variable: 130
```

```
arc: 130
variable: 52
variable: 131
activated variable: 73364
activated variable: 49836
activated variable: 73364
activated variable: 40855
activated variable: 73364
activated variable: 20862
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 49836
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 40855
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20862
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs:
                                   [238, 239, 240, 241, 242, 243, 244]
```

```
finding: [1, 1, 1, 1]
[238, 239, 240, 241, 242, 243, 244]
arc: 238
variable:
          84
variable: 218
arc: 239
variable: 84
variable:
         215
arc: 240
variable:
          84
arc: 241
variable: 84
variable:
          219
arc: 242
variable:
          84
variable:
         220
arc: 243
variable: 84
variable: 213
arc: 244
variable: 84
variable: 221
activated variable: 36617
activated variable: 2954633095
activated variable: 36617
activated variable: 730163709
activated variable: 36617
activated variable: 36617
activated variable:
                    2979318384
activated variable: 36617
activated variable: 2979318389
activated variable: 36617
activated variable: 2979318385
activated variable: 36617
activated variable: 13881945
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs:
                                   [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2954633095
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 36617
```

```
newly activated variable type: ar
newly activated variable out arcs:
                                   [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 730163709
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs:
                                    [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs:
                                   [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2979318384
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs:
                                   [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2979318389
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs:
                                    [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2979318385
```

```
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs:
                                   [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 13881945
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 22278
newly activated variable type: nk
newly activated variable out arcs: [14, 15, 71]
finding: [1, 1, 1, 1]
[14, 15, 71]
arc: 14
variable: 8
variable: 53
arc: 15
variable:
variable: 52
arc: 71
variable:
variable: 84
activated variable: 22278
activated variable: 41480
activated variable: 22278
activated variable: 73364
activated variable: 22278
activated variable: 36617
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs: [131, 132]
finding: [1, 1, 1, 1]
[131, 132]
arc: 131
variable:
          53
variable:
          132
arc: 132
variable: 53
variable: 133
```

```
activated variable: 41480
activated variable: 76805
activated variable: 41480
activated variable: 81821
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                   [131, 132]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 76805
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                   [131, 132]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 81821
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 1, 1, 1]
[128, 129, 130]
arc: 128
variable:
         52
variable: 129
arc: 129
variable: 52
variable: 130
arc: 130
variable: 52
variable: 131
activated variable: 73364
activated variable: 49836
activated variable: 73364
activated variable: 40855
activated variable: 73364
activated variable: 20862
```

```
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 49836
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 40855
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 73364
newly activated variable type: sk
newly activated variable out arcs:
                                   [128, 129, 130]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20862
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs: [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
[238, 239, 240, 241, 242, 243, 244]
arc: 238
variable: 84
variable: 218
arc: 239
variable: 84
variable: 215
arc: 240
```

```
variable:
          84
arc: 241
variable:
          84
variable:
          219
arc: 242
variable:
          84
variable:
          220
arc: 243
variable: 84
variable:
          213
arc: 244
variable: 84
variable: 221
activated variable: 36617
activated variable:
                    2954633095
activated variable: 36617
activated variable: 730163709
activated variable: 36617
activated variable: 36617
activated variable: 2979318384
activated variable: 36617
activated variable: 2979318389
activated variable: 36617
activated variable: 2979318385
activated variable: 36617
activated variable: 13881945
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs:
                                   [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2954633095
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs:
                                   [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 730163709
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs:
                                    [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 36617
newly activated variable type: ar
                                   [238, 239, 240, 241, 242, 243, 244]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2979318384
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs: [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2979318389
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs:
                                   [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2979318385
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 36617
newly activated variable type: ar
newly activated variable out arcs:
                                    [238, 239, 240, 241, 242, 243, 244]
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 13881945
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66218
newly activated variable type: nk
newly activated variable out arcs:
                                   [16, 17, 72]
finding:
         [1, 0, 0, 0]
[16, 17]
arc: 16
variable:
variable: 53
arc: 17
variable: 9
variable: 54
activated variable: 66218
activated variable: 41480
activated variable: 66218
activated variable: 81713
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                    [131, 132]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 81713
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 66218
newly activated variable type: nk
newly activated variable out arcs:
                                    [16, 17, 72]
finding: [1, 0, 0, 0]
[16, 17]
arc: 16
variable:
variable: 53
arc: 17
variable:
variable: 54
activated variable: 66218
activated variable: 41480
```

```
activated variable: 66218
activated variable: 81713
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                   [131, 132]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 81713
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 66218
newly activated variable type: nk
newly activated variable out arcs:
                                   [16, 17, 72]
         [1, 0, 0, 0]
finding:
[16, 17]
arc: 16
variable:
variable: 53
arc: 17
variable:
variable: 54
activated variable: 66218
activated variable: 41480
activated variable: 66218
activated variable: 81713
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                   [131, 132]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 81713
newly activated variable type: sk
newly activated variable out arcs:
                                    finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 66218
newly activated variable type: nk
newly activated variable out arcs:
                                    [16, 17, 72]
finding: [1, 0, 0, 0]
[16, 17]
arc: 16
variable: 9
```

```
variable: 53
arc: 17
variable:
variable: 54
activated variable: 66218
activated variable: 41480
activated variable: 66218
activated variable: 81713
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                   [131, 132]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 81713
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 66218
newly activated variable type: nk
newly activated variable out arcs:
                                   [16, 17, 72]
finding: [1, 1, 1, 1]
[16, 17, 72]
arc: 16
variable:
          53
variable:
arc: 17
variable:
variable:
          54
arc: 72
variable:
variable: 85
activated variable: 66218
activated variable: 41480
activated variable: 66218
activated variable: 81713
activated variable: 66218
activated variable: 20189
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                   [131, 132]
finding:
         [1, 1, 1, 1]
[131, 132]
arc: 131
variable: 53
variable: 132
```

```
arc: 132
variable: 53
variable: 133
activated variable: 41480
activated variable: 76805
activated variable: 41480
activated variable: 81821
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                   [131, 132]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 76805
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 41480
newly activated variable type: sk
newly activated variable out arcs:
                                    [131, 132]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 81821
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 81713
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs:
                                   [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
[245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260,
261]
arc: 245
variable:
variable:
          222
arc: 246
```

variable: 85 arc: 247 variable: 85 variable: 223 arc: 248 variable: 85 variable: 224 arc: 249 variable: 85 variable: 225 arc: 250 variable: 85 variable: 226 arc: 251 variable: 85 variable: 227 arc: 252 variable: 85 variable: 228 arc: 253 variable: 85 229 variable: arc: 254 variable: 85 variable: 230 arc: 255 variable: 85 variable: 231 arc: 256 variable: 85 variable: 232 arc: 257 variable: 85 variable: 233 arc: 258 variable: 85 arc: 259 variable: 85 variable: 234 arc: 260 variable: 85 variable: 235 arc: 261

activated variable: 20189 activated variable: 4681513744 activated variable: 20189

variable: 85 variable: 236

```
activated variable:
                    20189
activated variable: 2952724139
activated variable: 20189
activated variable: 2934740295
activated variable: 20189
activated variable: 2952724144
activated variable: 20189
activated variable: 529376792
activated variable: 20189
activated variable: 2952724140
activated variable: 20189
activated variable: 2931382326
activated variable: 20189
activated variable: 2952724143
activated variable:
                    20189
activated variable: 2952724141
activated variable: 20189
activated variable: 2952724142
activated variable: 20189
activated variable: 2931382323
activated variable: 20189
activated variable: 2934740299
activated variable: 20189
activated variable: 20189
activated variable: 2931382315
activated variable: 20189
activated variable: 2933059835
activated variable: 20189
activated variable: 2931382316
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs: [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4681513744
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs: [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs:
                                   [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2952724139
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs:
                                   [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2934740295
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs:
                                   [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2952724144
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs: [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 529376792
```

```
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs: [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2952724140
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs:
                                   [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2931382326
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs: [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2952724143
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs: [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2952724141
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs:
                                   [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2952724142
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs: [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2931382323
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs:
                                   [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2934740299
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs:
                                   [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs:
                                   [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2931382315
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs: [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2933059835
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 20189
newly activated variable type: ar
newly activated variable out arcs: [245, 246, 247, 248, 249, 250, 251, 252,
253, 254, 255, 256, 257, 258, 259, 260, 261]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2931382316
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 22132
newly activated variable type: nk
```

```
newly activated variable out arcs: [18, 19, 73]
finding: [1, 0, 0, 0]
[18, 19]
arc: 18
variable: 10
variable:
          55
arc: 19
variable: 10
variable: 54
activated variable: 22132
activated variable: 98249
activated variable: 22132
activated variable: 81713
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs:
                                   [133, 134]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 81713
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 22132
newly activated variable type: nk
newly activated variable out arcs:
                                   [18, 19, 73]
finding:
         [1, 0, 0, 0]
[18, 19]
    18
arc:
variable:
          10
variable:
         55
arc: 19
variable:
         10
variable: 54
activated variable: 22132
activated variable: 98249
activated variable: 22132
activated variable: 81713
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs:
                                   [133, 134]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 81713
newly activated variable type: sk
```

```
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 22132
newly activated variable type: nk
newly activated variable out arcs:
                                   [18, 19, 73]
finding: [1, 0, 0, 0]
[18, 19]
arc: 18
variable: 10
variable:
          55
arc: 19
variable:
          10
variable:
          54
activated variable: 22132
activated variable: 98249
activated variable: 22132
activated variable: 81713
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs:
                                   [133, 134]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 81713
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 22132
newly activated variable type: nk
newly activated variable out arcs: [18, 19, 73]
finding: [1, 1, 1, 1]
[18, 19, 73]
arc: 18
variable:
variable: 55
arc: 19
variable:
          10
variable:
          54
arc: 73
variable:
          10
variable:
          86
activated variable: 22132
activated variable:
                    98249
activated variable: 22132
```

```
activated variable: 81713
activated variable: 22132
activated variable: 10089
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs:
                                   [133, 134]
finding: [1, 1, 1, 1]
[133, 134]
arc: 133
variable:
          55
variable: 134
arc: 134
variable:
          55
variable: 135
activated variable: 98249
activated variable: 27023
activated variable: 98249
activated variable: 66926
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs:
                                   [133, 134]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 27023
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs:
                                    [133, 134]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 66926
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 81713
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs:
                                    [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
[262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277,
278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288]
arc: 262
variable:
           86
variable:
           237
arc: 263
variable:
arc: 264
variable:
           86
variable:
           238
arc: 265
variable:
           86
variable:
           239
arc: 266
variable:
           86
variable:
           240
arc: 267
variable:
           86
variable:
           233
arc: 268
variable:
           86
arc: 269
variable:
           86
variable:
           231
arc: 270
variable:
           86
variable:
           241
arc: 271
variable:
           86
arc: 272
variable:
           86
variable:
           242
arc: 273
variable:
           86
variable:
           236
arc: 274
variable:
           86
variable:
           243
arc: 275
variable:
           86
variable:
           244
```

arc: 276

variable: 86 variable: 245

arc: 277 variable: 86

variable: 235

arc: 278

variable: 86 variable: 230

arc: 279

variable: 86 variable: 246

arc: 280

variable: 86 variable: 247

arc: 281

variable: 86 variable: 248 arc: 282

variable: 86 variable: 249 arc: 283

variable: 86 variable: 223 arc: 284

variable: 86 variable: 234 arc: 285

variable: 86 variable: 227

arc: 286 variable: 86 variable: 232

arc: 287
variable: 86
variable: 250
arc: 288
variable: 86

variable: 251 activated variable: 10089

activated variable: 2930824239

activated variable: 10089 activated variable: 10089

activated variable: 5827504386 activated variable: 10089

activated variable: 2930824250 activated variable: 10089

activated variable: 2929677012

activated variable: 10089

```
activated variable: 2934740299
activated variable: 10089
activated variable: 10089
activated variable: 2952724142
activated variable: 10089
activated variable: 2948197197
activated variable: 10089
activated variable: 10089
activated variable: 639106656
activated variable: 10089
activated variable: 2931382316
activated variable: 10089
activated variable:
                    2929677013
activated variable: 10089
activated variable:
                    2935424120
activated variable: 10089
activated variable: 2929677035
activated variable: 10089
activated variable: 2933059835
activated variable: 10089
activated variable: 2952724141
activated variable: 10089
activated variable: 2924770646
activated variable: 10089
activated variable: 2924770648
activated variable: 10089
activated variable: 2924770651
activated variable: 10089
activated variable:
                    2924770653
activated variable: 10089
activated variable: 2952724139
activated variable: 10089
activated variable: 2931382315
activated variable: 10089
activated variable: 2952724140
activated variable: 10089
activated variable: 2931382323
activated variable: 10089
activated variable: 2929677043
activated variable: 10089
activated variable: 2929677048
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 2930824239
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs:
                                   [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 5827504386
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2930824250
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2929677012
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2934740299
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2952724142
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
```

```
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2948197197
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 639106656
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2931382316
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
```

```
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2929677013
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2935424120
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2929677035
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs:
                                   [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 2933059835
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs:
                                   [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2952724141
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
                                   [262, 263, 264, 265, 266, 267, 268, 269,
newly activated variable out arcs:
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2924770646
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs:
                                   [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2924770648
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2924770651
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2924770653
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2952724139
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2931382315
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2952724140
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2931382323
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2929677043
newly activated variable type: feature
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2929677048
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 22132
newly activated variable type: nk
newly activated variable out arcs: [18, 19, 73]
finding: [1, 1, 1, 1]
[18, 19, 73]
arc: 18
variable:
variable: 55
arc: 19
variable:
           10
variable:
          54
arc: 73
variable:
variable:
activated variable: 22132
activated variable: 98249
activated variable: 22132
activated variable: 81713
                     22132
activated variable:
activated variable: 10089
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs: [133, 134]
finding: [1, 1, 1, 1]
[133, 134]
arc: 133
variable:
          55
variable:
          134
arc: 134
variable:
          55
variable: 135
```

```
activated variable:
                    98249
activated variable: 27023
activated variable: 98249
activated variable: 66926
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs:
                                   [133, 134]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 27023
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs:
                                   [133, 134]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 66926
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 81713
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
[262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277,
278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288]
arc: 262
variable: 86
variable:
          237
arc: 263
variable:
         86
arc: 264
```

variable: 86

variable: 238

arc: 265

variable: 86

variable: 239

arc: 266

variable: 86

variable: 240

arc: 267

variable: 86

variable: 233

arc: 268

variable: 86

arc: 269

variable: 86

variable: 231

arc: 270

variable: 86

variable: 241

arc: 271

variable: 86

arc: 272

variable: 86

variable: 242

arc: 273

variable: 86

variable: 236

arc: 274

variable: 86

variable: 243

arc: 275

variable: 86

variable: 244

arc: 276

variable: 86

variable: 245

arc: 277

variable: 86

variable: 235

arc: 278

variable: 86

variable: 230

arc: 279

variable: 86

variable: 246

arc: 280

variable: 86

variable: 247

arc: 281 variable: 86 variable: 248 arc: 282 variable: 86 249 variable: arc: 283 variable: 86 variable: 223 arc: 284 variable: 86 variable: 234 arc: 285 variable: 86 variable: 227 arc: 286 variable: 86 variable: 232 arc: 287 variable: 86 variable: 250 arc: 288 variable: 86 variable: 251

activated variable: 10089
activated variable: 2930824239
activated variable: 10089
activated variable: 10089
activated variable: 5827504386

activated variable: 10089

activated variable: 2930824250

activated variable: 10089

activated variable: 2929677012 activated variable: 10089

activated variable: 2934740299 activated variable: 10089 activated variable: 10089

activated variable: 2952724142

activated variable: 10089

activated variable: 2948197197

activated variable: 10089 activated variable: 10089 activated variable: 639106656 activated variable: 10089

activated variable: 2931382316

activated variable: 10089 activated variable: 2929677013

activated variable: 10089

```
activated variable:
                    2935424120
activated variable: 10089
activated variable: 2929677035
activated variable: 10089
activated variable: 2933059835
activated variable: 10089
activated variable: 2952724141
activated variable: 10089
activated variable: 2924770646
activated variable: 10089
activated variable: 2924770648
activated variable: 10089
activated variable: 2924770651
activated variable: 10089
activated variable:
                    2924770653
activated variable: 10089
activated variable: 2952724139
activated variable: 10089
activated variable: 2931382315
activated variable: 10089
activated variable: 2952724140
activated variable: 10089
activated variable: 2931382323
activated variable: 10089
activated variable: 2929677043
activated variable: 10089
activated variable: 2929677048
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2930824239
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 5827504386
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2930824250
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2929677012
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2934740299
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2952724142
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2948197197
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
```

```
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 639106656
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2931382316
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2929677013
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
```

```
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2935424120
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2929677035
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2933059835
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs:
                                   [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 2952724141
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs:
                                   [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2924770646
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
                                   [262, 263, 264, 265, 266, 267, 268, 269,
newly activated variable out arcs:
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2924770648
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs:
                                   [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2924770651
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2924770653
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2952724139
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2931382315
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2952724140
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2931382323
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2929677043
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 10089
newly activated variable type: ar
newly activated variable out arcs: [262, 263, 264, 265, 266, 267, 268, 269,
270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285,
286, 287, 288]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2929677048
newly activated variable type: feature
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 63018
newly activated variable type: nk
newly activated variable out arcs:
                                   [20, 21, 74]
finding:
         [1, 0, 0, 0]
[20, 21]
arc: 20
variable:
variable: 56
arc: 21
variable:
          11
variable:
          55
activated variable:
                     63018
activated variable: 59266
activated variable:
                    63018
activated variable: 98249
newly activated variable id: 59266
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs:
                                    [133, 134]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 63018
newly activated variable type: nk
newly activated variable out arcs:
                                    [20, 21, 74]
finding: [1, 0, 0, 0]
[20, 21]
arc: 20
variable: 11
variable:
arc: 21
variable: 11
variable: 55
activated variable: 63018
activated variable:
                     59266
activated variable:
                     63018
activated variable: 98249
newly activated variable id: 59266
newly activated variable type: sk
newly activated variable out arcs:
```

```
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs:
                                   [133, 134]
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 63018
newly activated variable type: nk
newly activated variable out arcs:
                                    [20, 21, 74]
         [1, 0, 0, 0]
finding:
[20, 21]
arc: 20
variable:
variable:
          56
arc: 21
variable: 11
variable: 55
activated variable: 63018
activated variable: 59266
activated variable: 63018
activated variable: 98249
newly activated variable id: 59266
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs:
                                    [133, 134]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 63018
newly activated variable type: nk
newly activated variable out arcs: [20, 21, 74]
finding: [1, 0, 0, 0]
[20, 21]
arc: 20
variable: 11
variable: 56
arc: 21
variable:
          11
variable:
activated variable: 63018
```

```
activated variable:
                    59266
activated variable: 63018
activated variable: 98249
newly activated variable id: 59266
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 98249
newly activated variable type: sk
                                    [133, 134]
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 63018
newly activated variable type: nk
newly activated variable out arcs:
                                   [20, 21, 74]
finding: [1, 1, 1, 1]
[20, 21, 74]
arc: 20
variable:
variable:
arc: 21
variable: 11
variable:
          55
arc: 74
variable:
          11
variable: 87
activated variable: 63018
activated variable: 59266
activated variable: 63018
activated variable: 98249
activated variable: 63018
activated variable: 43087
newly activated variable id: 59266
newly activated variable type: sk
newly activated variable out arcs:
                                    finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs:
                                    [133, 134]
finding:
         [1, 1, 1, 1]
[133, 134]
arc: 133
variable: 55
```

```
variable:
         134
arc: 134
variable:
          55
variable: 135
activated variable: 98249
activated variable: 27023
activated variable: 98249
activated variable: 66926
newly activated variable id: 98249
newly activated variable type: sk
newly activated variable out arcs:
                                   [133, 134]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 27023
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 98249
newly activated variable type: sk
                                   [133, 134]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 66926
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs:
                                   [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
[289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304,
305, 306, 307, 308]
arc: 289
variable:
          87
variable:
          252
arc: 290
variable:
variable:
          253
arc: 291
variable: 87
variable: 254
```

variable: 87 255 variable: arc: 293 variable: 87 variable: 256 arc: 294 variable: 87 arc: 295 variable: 87 variable: 257 arc: 296 variable: 87 258 variable: arc: 297 variable: 87 variable: 259 arc: 298 variable: 87 arc: 299 variable: 87 variable: 260 arc: 300 variable: 87 variable: 261 arc: 301 variable: 87 arc: 302 87 variable: arc: 303 variable: 87 variable: 262 arc: 304 variable: 87 variable: 263 arc: 305 variable: 87 variable: 264 arc: 306 variable: 87 arc: 307 variable: 87 variable: 265 arc: 308 variable: 87 variable: 266 activated variable: 43087 activated variable: 3090894886

arc: 292

```
activated variable:
                    43087
activated variable: 3090894885
activated variable: 43087
activated variable:
                    2934744804
activated variable: 43087
activated variable: 844905933
activated variable: 43087
activated variable: 2933576281
activated variable: 43087
activated variable: 43087
activated variable:
                    2930824244
activated variable: 43087
activated variable:
                    2930824237
activated variable: 43087
activated variable:
                    2930824242
activated variable: 43087
activated variable: 43087
activated variable: 2930824238
activated variable: 43087
activated variable: 2934740298
activated variable: 43087
activated variable:
                    43087
activated variable: 43087
activated variable: 2112387182
activated variable: 43087
activated variable: 2934740294
activated variable: 43087
activated variable: 448296176
activated variable: 43087
activated variable: 43087
activated variable: 2934740292
activated variable: 43087
activated variable: 2934740293
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs: [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 3090894886
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
```

```
newly activated variable out arcs: [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 3090894885
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs:
                                   [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2934744804
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs:
                                   [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 844905933
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs: [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2933576281
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs:
                                   [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs:
                                   [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2930824244
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs: [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2930824237
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs:
                                   [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2930824242
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 43087
newly activated variable type: ar
                                   [289, 290, 291, 292, 293, 294, 295, 296,
newly activated variable out arcs:
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs:
                                   [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2930824238
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs: [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2934740298
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs: [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs: [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 43087
```

```
newly activated variable type: ar
newly activated variable out arcs:
                                   [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2112387182
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs:
                                   [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2934740294
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs:
                                   [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 448296176
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs:
                                   [289, 290, 291, 292, 293, 294, 295, 296,
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
newly activated variable out arcs:
                                   [289, 290, 291, 292, 293, 294, 295, 296,
```

```
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2934740292
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 43087
newly activated variable type: ar
                                    [289, 290, 291, 292, 293, 294, 295, 296,
newly activated variable out arcs:
297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2934740293
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 33974
newly activated variable type: nk
newly activated variable out arcs:
                                    [22, 23, 75]
         [1, 0, 0, 0]
finding:
[22, 23]
arc: 22
variable:
variable:
arc: 23
variable:
          12
variable: 57
activated variable: 33974
activated variable: 59266
activated variable: 33974
activated variable: 82503
newly activated variable id: 59266
newly activated variable type: sk
newly activated variable out arcs:
                                    finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 82503
newly activated variable type: sk
newly activated variable out arcs:
                                    [135]
finding: [1, 0, 0, 0]
```

```
Π
count of activated variables: 0
newly activated variable id: 33974
newly activated variable type: nk
newly activated variable out arcs:
                                   [22, 23, 75]
finding:
         [1, 0, 0, 0]
[22, 23]
arc: 22
variable:
          12
variable:
          56
arc: 23
variable:
          12
variable:
          57
activated variable:
                    33974
activated variable:
                     59266
activated variable:
                    33974
activated variable: 82503
newly activated variable id: 59266
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 82503
newly activated variable type: sk
newly activated variable out arcs:
                                    [135]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 33974
newly activated variable type: nk
newly activated variable out arcs:
                                   [22, 23, 75]
finding: [1, 0, 0, 0]
[22, 23]
arc: 22
variable: 12
variable:
          56
arc: 23
variable: 12
variable: 57
activated variable: 33974
activated variable:
                    59266
activated variable:
                     33974
activated variable: 82503
newly activated variable id: 59266
newly activated variable type: sk
newly activated variable out arcs:
                                   finding: [1, 0, 0, 0]
```

```
Π
count of activated variables: 0
newly activated variable id: 82503
newly activated variable type: sk
newly activated variable out arcs:
                                    [135]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 33974
newly activated variable type: nk
newly activated variable out arcs:
                                    [22, 23, 75]
finding:
         [1, 0, 0, 0]
[22, 23]
arc: 22
variable:
variable: 56
arc: 23
variable: 12
variable: 57
activated variable: 33974
activated variable: 59266
activated variable:
                     33974
activated variable: 82503
newly activated variable id: 59266
newly activated variable type: sk
newly activated variable out arcs:
                                    finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 82503
newly activated variable type: sk
newly activated variable out arcs:
                                    [135]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 33974
newly activated variable type: nk
newly activated variable out arcs:
                                    [22, 23, 75]
finding: [1, 1, 1, 1]
[22, 23, 75]
arc: 22
variable:
           12
variable:
          56
arc: 23
variable:
variable:
arc: 75
variable: 12
```

```
variable: 88
activated variable: 33974
activated variable: 59266
activated variable:
                    33974
activated variable: 82503
activated variable: 33974
activated variable: 11108
newly activated variable id: 59266
newly activated variable type: sk
newly activated variable out arcs:
                                    finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82503
newly activated variable type: sk
newly activated variable out arcs:
                                    [135]
finding: [1, 1, 1, 1]
[135]
arc: 135
variable: 57
variable: 136
activated variable: 82503
activated variable: 43268
newly activated variable id: 82503
newly activated variable type: sk
newly activated variable out arcs:
                                    [135]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 43268
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs:
                                   [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
[309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324,
325, 326, 327, 328, 329, 330, 331, 332]
arc: 309
variable:
          88
variable:
           267
arc: 310
variable:
arc: 311
```

variable: 88

variable: 268

arc: 312

variable: 88

variable: 266

arc: 313

variable: 88

arc: 314

variable: 88

variable: 269

arc: 315

variable: 88

variable: 270

arc: 316

variable: 88

variable: 257

arc: 317

variable: 88

arc: 318

variable: 88

variable: 271

arc: 319

variable: 88

variable: 265

arc: 320

variable: 88

variable: 262

arc: 321

variable: 88

arc: 322

variable: 88

variable: 254

arc: 323

variable: 88

arc: 324

variable: 88

variable: 272

arc: 325

variable: 88

variable: 258

arc: 326

variable: 88

variable: 273

arc: 327

variable: 88

arc: 328

variable: 88

variable: 274

arc: 329 variable: 88 variable: 256 arc: 330 variable: 88 arc: 331 variable: 88 variable: 275 arc: 332 variable: 88 variable: 276

activated variable: 11108 2930824235 activated variable: activated variable: 11108 activated variable: 11108 702500249 activated variable: activated variable: 11108 activated variable: 2934740293 activated variable: 11108 activated variable: 11108

activated variable: 2871318168 activated variable: 11108

activated variable: 2930824236
activated variable: 11108
activated variable: 2930824244
activated variable: 11108
activated variable: 11108
activated variable: 2933576266
activated variable: 11108

activated variable: 2934740292 activated variable: 11108

activated variable: 2112387182 activated variable: 11108 activated variable: 11108

activated variable: 2934744804 activated variable: 11108 activated variable: 11108 activated variable: 2441578932

activated variable: 11108 activated variable: 2930824237 activated variable: 11108

activated variable: 2933576280 activated variable: 11108 activated variable: 11108 activated variable: 2598319333 activated variable: 11108

activated variable: 2933576281 activated variable: 11108

```
activated variable: 11108
activated variable: 2382624221
activated variable: 11108
activated variable: 2924770803
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2930824235
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs:
                                   [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 702500249
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2934740293
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs:
                                   [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2871318168
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2930824236
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs:
                                   [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2930824244
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs:
                                   [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2933576266
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2934740292
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2112387182
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
```

```
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2934744804
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2441578932
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2930824237
newly activated variable type: feature
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2933576280
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2598319333
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2933576281
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
newly activated variable out arcs: [309, 310, 311, 312, 313, 314, 315, 316,
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2382624221
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 11108
newly activated variable type: ar
                                   [309, 310, 311, 312, 313, 314, 315, 316,
newly activated variable out arcs:
317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2924770803
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20756
newly activated variable type: nk
newly activated variable out arcs: [28, 29, 76]
         [1, 0, 0, 0]
finding:
[28, 29]
arc: 28
variable:
         15
variable:
          60
arc: 29
variable:
         15
variable:
          59
activated variable:
                    20756
activated variable:
                    85802
activated variable: 20756
```

```
activated variable: 32953
newly activated variable id: 85802
newly activated variable type: sk
newly activated variable out arcs:
                                    [145]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 32953
newly activated variable type: sk
newly activated variable out arcs:
                                    [144]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 20756
newly activated variable type: nk
newly activated variable out arcs:
                                    [28, 29, 76]
finding:
         [1, 0, 0, 0]
[28, 29]
arc: 28
variable:
          15
variable:
          60
arc: 29
variable: 15
variable: 59
activated variable: 20756
activated variable:
                    85802
activated variable:
                     20756
activated variable: 32953
newly activated variable id: 85802
newly activated variable type: sk
newly activated variable out arcs:
                                    [145]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 32953
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 20756
newly activated variable type: nk
newly activated variable out arcs:
                                    [28, 29, 76]
finding:
         [1, 0, 0, 0]
[28, 29]
arc: 28
variable: 15
variable: 60
```

```
arc: 29
variable: 15
variable: 59
activated variable: 20756
activated variable: 85802
activated variable:
                    20756
activated variable: 32953
newly activated variable id: 85802
newly activated variable type: sk
newly activated variable out arcs:
                                   [145]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 32953
newly activated variable type: sk
newly activated variable out arcs:
                                    [144]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 20756
newly activated variable type: nk
newly activated variable out arcs:
                                    [28, 29, 76]
finding:
         [1, 0, 0, 0]
[28, 29]
arc: 28
variable:
         15
variable: 60
arc: 29
variable: 15
variable: 59
activated variable:
                    20756
activated variable: 85802
activated variable:
                    20756
activated variable: 32953
newly activated variable id: 85802
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 32953
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 20756
newly activated variable type: nk
```

```
newly activated variable out arcs: [28, 29, 76]
finding: [1, 1, 1, 1]
[28, 29, 76]
arc: 28
variable:
          15
variable:
          60
arc: 29
variable: 15
variable:
arc: 76
variable: 15
variable: 89
activated variable:
                    20756
activated variable: 85802
activated variable:
                    20756
activated variable: 32953
activated variable:
                    20756
activated variable: 83619
newly activated variable id: 85802
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
[145]
arc: 145
variable:
          60
variable: 146
activated variable: 85802
activated variable: 76763
newly activated variable id: 85802
newly activated variable type: sk
newly activated variable out arcs:
                                   [145]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 76763
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 32953
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
[144]
arc: 144
variable: 59
variable: 145
```

```
activated variable: 32953
activated variable: 48052
newly activated variable id: 32953
newly activated variable type: sk
newly activated variable out arcs:
                                    [144]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 48052
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 83619
newly activated variable type: ar
newly activated variable out arcs:
                                   [333, 334, 335, 336, 337, 338, 339, 340,
341, 342, 343, 344]
finding: [1, 1, 1, 1]
[333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344]
arc: 333
variable:
variable:
          277
arc: 334
variable: 89
variable:
          278
arc: 335
variable:
          89
arc: 336
variable:
arc: 337
variable:
          89
variable:
          279
arc: 338
variable:
          89
variable:
          280
arc: 339
variable:
variable:
          281
arc: 340
variable:
          89
variable:
          282
arc: 341
variable:
          89
variable:
          283
arc: 342
variable:
          89
variable: 284
```

```
arc: 343
variable:
          89
          285
variable:
arc: 344
variable: 89
          286
variable:
activated variable: 83619
activated variable:
                    2932743691
activated variable: 83619
activated variable: 2935266939
activated variable: 83619
activated variable:
                    83619
activated variable:
                    83619
activated variable: 4259939107
activated variable:
                    83619
activated variable: 2871537465
activated variable: 83619
activated variable: 2932743676
activated variable: 83619
activated variable: 4560886486
activated variable: 83619
activated variable: 5703344013
activated variable: 83619
activated variable: 5536228960
activated variable: 83619
activated variable: 3838742959
activated variable: 83619
activated variable: 25284923
newly activated variable id: 83619
newly activated variable type: ar
newly activated variable out arcs: [333, 334, 335, 336, 337, 338, 339, 340,
341, 342, 343, 344]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2932743691
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 83619
newly activated variable type: ar
                                   [333, 334, 335, 336, 337, 338, 339, 340,
newly activated variable out arcs:
341, 342, 343, 344]
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 2935266939
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 83619
newly activated variable type: ar
                                   [333, 334, 335, 336, 337, 338, 339, 340,
newly activated variable out arcs:
341, 342, 343, 344]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 83619
newly activated variable type: ar
                                    [333, 334, 335, 336, 337, 338, 339, 340,
newly activated variable out arcs:
341, 342, 343, 344]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 83619
newly activated variable type: ar
newly activated variable out arcs:
                                   [333, 334, 335, 336, 337, 338, 339, 340,
341, 342, 343, 344]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4259939107
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 83619
newly activated variable type: ar
newly activated variable out arcs:
                                   [333, 334, 335, 336, 337, 338, 339, 340,
341, 342, 343, 344]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 2871537465
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 83619
newly activated variable type: ar
```

```
newly activated variable out arcs: [333, 334, 335, 336, 337, 338, 339, 340,
341, 342, 343, 344]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2932743676
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 83619
newly activated variable type: ar
newly activated variable out arcs:
                                   [333, 334, 335, 336, 337, 338, 339, 340,
341, 342, 343, 344]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4560886486
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 83619
newly activated variable type: ar
newly activated variable out arcs:
                                    [333, 334, 335, 336, 337, 338, 339, 340,
341, 342, 343, 344]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 5703344013
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 83619
newly activated variable type: ar
newly activated variable out arcs: [333, 334, 335, 336, 337, 338, 339, 340,
341, 342, 343, 344]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 5536228960
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 83619
newly activated variable type: ar
newly activated variable out arcs:
                                    [333, 334, 335, 336, 337, 338, 339, 340,
341, 342, 343, 344]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 3838742959
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 83619
newly activated variable type: ar
newly activated variable out arcs:
                                   [333, 334, 335, 336, 337, 338, 339, 340,
341, 342, 343, 344]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 25284923
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 62187
newly activated variable type: nk
newly activated variable out arcs:
                                   [30, 31, 77]
finding:
         [1, 0, 0, 0]
[30, 31]
arc: 30
variable:
          16
variable: 61
arc: 31
variable:
variable: 60
activated variable: 62187
activated variable: 14489
activated variable: 62187
activated variable: 85802
newly activated variable id: 14489
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
```

```
count of activated variables: 0
newly activated variable id: 85802
newly activated variable type: sk
newly activated variable out arcs:
                                    [145]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 62187
newly activated variable type: nk
newly activated variable out arcs:
                                   [30, 31, 77]
finding: [1, 0, 0, 0]
[30, 31]
arc: 30
variable:
          16
variable:
arc: 31
variable:
variable: 60
activated variable: 62187
activated variable: 14489
activated variable: 62187
activated variable: 85802
newly activated variable id: 14489
newly activated variable type: sk
newly activated variable out arcs: [146]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 85802
newly activated variable type: sk
newly activated variable out arcs:
                                    [145]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 62187
newly activated variable type: nk
newly activated variable out arcs:
                                   [30, 31, 77]
finding:
         [1, 0, 0, 0]
[30, 31]
arc: 30
variable: 16
variable:
         61
arc: 31
variable:
          16
variable:
activated variable: 62187
activated variable: 14489
activated variable: 62187
```

```
activated variable: 85802
newly activated variable id: 14489
newly activated variable type: sk
newly activated variable out arcs:
                                    [146]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 85802
newly activated variable type: sk
newly activated variable out arcs:
                                    [145]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 62187
newly activated variable type: nk
newly activated variable out arcs:
                                    [30, 31, 77]
finding:
         [1, 0, 0, 0]
[30, 31]
arc: 30
variable:
          16
variable:
          61
arc: 31
variable: 16
variable: 60
activated variable: 62187
activated variable: 14489
activated variable: 62187
activated variable: 85802
newly activated variable id: 14489
newly activated variable type: sk
newly activated variable out arcs:
                                    [146]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 85802
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 62187
newly activated variable type: nk
newly activated variable out arcs:
                                    [30, 31, 77]
finding: [1, 1, 1, 1]
[30, 31, 77]
arc: 30
variable: 16
variable: 61
```

```
arc: 31
variable:
variable:
          60
arc: 77
variable:
         16
variable: 90
activated variable: 62187
activated variable:
activated variable: 62187
activated variable: 85802
activated variable: 62187
activated variable: 50396
newly activated variable id: 14489
newly activated variable type: sk
newly activated variable out arcs:
                                   [146]
finding: [1, 1, 1, 1]
[146]
arc: 146
variable: 61
variable: 147
activated variable: 14489
activated variable: 41180
newly activated variable id: 14489
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 41180
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 85802
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Γ145]
arc: 145
variable: 60
variable: 146
activated variable: 85802
activated variable: 76763
newly activated variable id: 85802
newly activated variable type: sk
newly activated variable out arcs:
                                   [145]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 76763
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 50396
newly activated variable type: ar
                                    [345, 346, 347, 348, 349, 350, 351, 352,
newly activated variable out arcs:
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
[345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357]
arc: 345
variable:
           90
variable:
           287
arc: 346
variable:
           90
arc: 347
variable:
          90
           279
variable:
arc: 348
variable:
          90
variable:
           288
arc: 349
variable:
           90
variable:
           281
arc: 350
variable:
variable:
           289
arc: 351
variable:
          90
arc: 352
variable:
          90
variable:
           286
arc: 353
variable:
           90
variable:
          277
arc: 354
variable:
          90
variable:
           285
arc: 355
variable:
           90
variable:
           282
arc: 356
variable:
           90
variable: 283
```

```
arc: 357
variable:
          90
variable: 284
activated variable: 50396
activated variable: 3838742962
activated variable: 50396
activated variable: 50396
activated variable: 4259939107
activated variable: 50396
activated variable: 2932743677
activated variable: 50396
activated variable: 2932743676
activated variable: 50396
activated variable: 2858902357
activated variable:
                    50396
activated variable: 50396
activated variable: 25284923
activated variable: 50396
activated variable: 2932743691
activated variable: 50396
activated variable: 3838742959
activated variable: 50396
activated variable: 4560886486
activated variable: 50396
activated variable: 5703344013
activated variable: 50396
activated variable: 5536228960
newly activated variable id: 50396
newly activated variable type: ar
newly activated variable out arcs:
                                   [345, 346, 347, 348, 349, 350, 351, 352,
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 3838742962
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 50396
newly activated variable type: ar
newly activated variable out arcs:
                                   [345, 346, 347, 348, 349, 350, 351, 352,
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 50396
```

```
newly activated variable type: ar
newly activated variable out arcs:
                                   [345, 346, 347, 348, 349, 350, 351, 352,
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4259939107
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 50396
newly activated variable type: ar
newly activated variable out arcs:
                                    [345, 346, 347, 348, 349, 350, 351, 352,
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2932743677
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 50396
newly activated variable type: ar
newly activated variable out arcs:
                                   [345, 346, 347, 348, 349, 350, 351, 352,
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2932743676
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 50396
newly activated variable type: ar
newly activated variable out arcs:
                                    [345, 346, 347, 348, 349, 350, 351, 352,
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 2858902357
newly activated variable type: feature
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 50396
newly activated variable type: ar
newly activated variable out arcs: [345, 346, 347, 348, 349, 350, 351, 352,
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 50396
newly activated variable type: ar
newly activated variable out arcs:
                                   [345, 346, 347, 348, 349, 350, 351, 352,
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 25284923
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 50396
newly activated variable type: ar
newly activated variable out arcs:
                                   [345, 346, 347, 348, 349, 350, 351, 352,
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2932743691
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 50396
newly activated variable type: ar
newly activated variable out arcs: [345, 346, 347, 348, 349, 350, 351, 352,
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 3838742959
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 50396
newly activated variable type: ar
newly activated variable out arcs:
                                    [345, 346, 347, 348, 349, 350, 351, 352,
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4560886486
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 50396
newly activated variable type: ar
newly activated variable out arcs:
                                   [345, 346, 347, 348, 349, 350, 351, 352,
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 5703344013
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 50396
newly activated variable type: ar
newly activated variable out arcs:
                                    [345, 346, 347, 348, 349, 350, 351, 352,
353, 354, 355, 356, 357]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 5536228960
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 48318
newly activated variable type: nk
newly activated variable out arcs:
                                    [39, 40, 78]
finding: [1, 0, 0, 0]
[39, 40]
arc: 39
variable: 21
variable: 65
```

```
arc: 40
variable:
          21
variable: 66
activated variable: 48318
activated variable: 95688
activated variable: 48318
activated variable: 24717
newly activated variable id: 95688
newly activated variable type: sk
newly activated variable out arcs:
                                   [147, 148, 149]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 24717
newly activated variable type: sk
newly activated variable out arcs:
                                    [150]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 48318
newly activated variable type: nk
newly activated variable out arcs:
                                    [39, 40, 78]
finding:
         [1, 0, 0, 0]
[39, 40]
arc: 39
variable:
          21
variable: 65
arc: 40
variable: 21
variable: 66
activated variable: 48318
activated variable: 95688
activated variable: 48318
activated variable: 24717
newly activated variable id: 95688
newly activated variable type: sk
newly activated variable out arcs: [147, 148, 149]
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 24717
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 48318
newly activated variable type: nk
```

```
newly activated variable out arcs: [39, 40, 78]
finding: [1, 0, 0, 0]
[39, 40]
arc: 39
variable: 21
variable:
          65
arc: 40
variable: 21
variable: 66
activated variable: 48318
activated variable: 95688
activated variable: 48318
activated variable: 24717
newly activated variable id: 95688
newly activated variable type: sk
newly activated variable out arcs:
                                   [147, 148, 149]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 24717
newly activated variable type: sk
newly activated variable out arcs:
                                    [150]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 48318
newly activated variable type: nk
newly activated variable out arcs:
                                   [39, 40, 78]
finding:
         [1, 0, 0, 0]
[39, 40]
arc: 39
variable:
          21
variable:
         65
arc: 40
variable:
         21
variable: 66
activated variable: 48318
activated variable: 95688
activated variable: 48318
activated variable: 24717
newly activated variable id: 95688
newly activated variable type: sk
newly activated variable out arcs: [147, 148, 149]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 24717
newly activated variable type: sk
```

```
newly activated variable out arcs: [150]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 48318
newly activated variable type: nk
newly activated variable out arcs:
                                   [39, 40, 78]
finding: [1, 1, 1, 1]
[39, 40, 78]
arc: 39
variable:
           21
variable:
          65
arc: 40
variable:
          21
variable:
arc: 78
variable:
          21
variable: 91
activated variable: 48318
activated variable: 95688
activated variable: 48318
activated variable:
                     24717
activated variable: 48318
activated variable: 23149
newly activated variable id: 95688
newly activated variable type: sk
newly activated variable out arcs:
                                   [147, 148, 149]
finding: [1, 1, 1, 1]
[147, 148, 149]
arc: 147
variable:
variable:
          148
arc: 148
variable:
          65
variable:
          149
arc: 149
variable: 65
variable: 150
activated variable: 95688
activated variable:
                    12359
activated variable: 95688
activated variable: 78609
activated variable:
                    95688
activated variable: 28912
newly activated variable id: 95688
newly activated variable type: sk
newly activated variable out arcs:
                                   [147, 148, 149]
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 12359
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 95688
newly activated variable type: sk
newly activated variable out arcs:
                                   [147, 148, 149]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 78609
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 95688
newly activated variable type: sk
newly activated variable out arcs: [147, 148, 149]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 28912
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 24717
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
[150]
arc: 150
variable: 66
variable: 151
activated variable: 24717
activated variable: 45252
newly activated variable id: 24717
newly activated variable type: sk
newly activated variable out arcs:
                                   [150]
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 45252
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                     [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
[358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372]
arc: 358
variable:
arc: 359
variable:
           91
variable:
           290
arc: 360
variable:
           91
arc: 361
variable:
           91
variable:
           291
arc: 362
variable:
           91
variable:
           292
arc: 363
variable:
           91
arc: 364
variable:
           91
arc: 365
variable:
           91
variable:
           293
arc: 366
variable:
           91
variable:
           294
arc: 367
variable:
variable:
           295
arc: 368
variable:
          91
variable:
           296
arc: 369
variable:
           91
arc: 370
variable:
variable:
           297
arc: 371
variable: 91
```

```
variable:
          298
arc: 372
variable:
         91
variable: 299
activated variable: 23149
activated variable: 23149
activated variable: 502534800
activated variable: 23149
activated variable: 23149
activated variable: 3349693118
activated variable: 23149
activated variable: 2137551060
activated variable:
                    23149
activated variable: 23149
activated variable:
                    23149
activated variable: 5191958572
activated variable: 23149
activated variable: 5191958578
activated variable: 23149
activated variable: 3349693121
activated variable: 23149
activated variable: 4865859912
activated variable: 23149
activated variable: 23149
activated variable: 2071441564
activated variable: 23149
activated variable: 4865859911
activated variable: 23149
activated variable: 3349693102
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                   [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                   [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 502534800
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                    [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                    [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 3349693118
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                    [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2137551060
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                    [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                    [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                    [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 5191958572
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type: ar
                                    [358, 359, 360, 361, 362, 363, 364, 365,
newly activated variable out arcs:
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 5191958578
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                    [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 3349693121
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                    [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4865859912
newly activated variable type: feature
```

```
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type:
newly activated variable out arcs:
                                    [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                    [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2071441564
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                    [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4865859911
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 23149
newly activated variable type: ar
newly activated variable out arcs:
                                    [358, 359, 360, 361, 362, 363, 364, 365,
366, 367, 368, 369, 370, 371, 372]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 3349693102
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 21027
newly activated variable type: nk
newly activated variable out arcs:
                                   [41, 42, 79]
finding:
         [1, 0, 0, 0]
[41, 42]
arc: 41
variable:
          22
variable:
arc: 42
variable:
         22
variable:
          67
activated variable: 21027
activated variable:
                     24717
activated variable:
                    21027
activated variable: 51670
newly activated variable id: 24717
newly activated variable type: sk
newly activated variable out arcs:
                                   [150]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 51670
newly activated variable type: sk
newly activated variable out arcs:
                                    [151]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 21027
newly activated variable type: nk
newly activated variable out arcs:
                                   [41, 42, 79]
finding: [1, 0, 0, 0]
[41, 42]
arc: 41
variable: 22
variable: 66
arc: 42
variable:
          22
variable: 67
activated variable: 21027
activated variable: 24717
activated variable:
                     21027
activated variable: 51670
newly activated variable id: 24717
newly activated variable type: sk
newly activated variable out arcs:
                                    [150]
finding: [1, 0, 0, 0]
```

```
Π
count of activated variables: 0
newly activated variable id: 51670
newly activated variable type: sk
newly activated variable out arcs:
                                    [151]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 21027
newly activated variable type: nk
newly activated variable out arcs:
                                   [41, 42, 79]
finding:
         [1, 0, 0, 0]
[41, 42]
arc: 41
variable:
variable: 66
arc: 42
variable: 22
variable: 67
activated variable: 21027
activated variable: 24717
activated variable: 21027
activated variable: 51670
newly activated variable id: 24717
newly activated variable type: sk
newly activated variable out arcs:
                                    [150]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 51670
newly activated variable type: sk
newly activated variable out arcs:
                                    [151]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 21027
newly activated variable type: nk
newly activated variable out arcs:
                                    [41, 42, 79]
finding: [1, 1, 1, 1]
[41, 42, 79]
arc: 41
           22
variable:
variable:
           66
arc: 42
variable:
variable:
arc: 79
variable: 22
```

```
variable: 92
activated variable: 21027
activated variable: 24717
activated variable: 21027
activated variable: 51670
activated variable:
                    21027
activated variable: 75861
newly activated variable id: 24717
newly activated variable type: sk
newly activated variable out arcs:
                                   [150]
finding: [1, 1, 1, 1]
[150]
arc: 150
variable:
          66
variable:
          151
activated variable: 24717
activated variable: 45252
newly activated variable id: 24717
newly activated variable type: sk
newly activated variable out arcs:
                                   [150]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 45252
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 51670
newly activated variable type: sk
newly activated variable out arcs:
                                   [151]
finding: [1, 1, 1, 1]
[151]
arc: 151
variable: 67
variable: 152
activated variable: 51670
activated variable: 46043
newly activated variable id: 51670
newly activated variable type: sk
newly activated variable out arcs:
                                   [151]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 46043
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 75861
newly activated variable type: ar
newly activated variable out arcs: [373, 374, 375, 376, 377]
finding: [1, 1, 1, 1]
[373, 374, 375, 376, 377]
arc: 373
variable:
           92
variable:
           300
arc: 374
variable:
           92
variable:
          301
arc: 375
variable:
          92
arc: 376
variable:
          92
variable:
          302
arc: 377
variable:
          92
variable: 303
activated variable: 75861
activated variable: 3284000580
activated variable: 75861
activated variable: 3279082732
activated variable: 75861
activated variable: 75861
activated variable:
                     2127365276
activated variable: 75861
activated variable: 3940108856
newly activated variable id: 75861
newly activated variable type: ar
newly activated variable out arcs: [373, 374, 375, 376, 377]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 3284000580
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 75861
newly activated variable type: ar
newly activated variable out arcs:
                                   [373, 374, 375, 376, 377]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 3279082732
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 75861
newly activated variable type: ar
newly activated variable out arcs:
                                   [373, 374, 375, 376, 377]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 75861
newly activated variable type: ar
                                    [373, 374, 375, 376, 377]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2127365276
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 75861
newly activated variable type: ar
newly activated variable out arcs:
                                   [373, 374, 375, 376, 377]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 3940108856
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 21027
newly activated variable type: nk
newly activated variable out arcs: [41, 42, 79]
finding: [1, 1, 1, 1]
[41, 42, 79]
arc: 41
variable:
         22
variable:
arc: 42
variable: 22
variable: 67
```

```
arc: 79
variable:
          22
variable: 92
activated variable: 21027
activated variable: 24717
activated variable: 21027
activated variable: 51670
activated variable: 21027
activated variable: 75861
newly activated variable id: 24717
newly activated variable type: sk
newly activated variable out arcs:
                                   [150]
finding: [1, 1, 1, 1]
[150]
arc: 150
variable: 66
variable: 151
activated variable: 24717
activated variable: 45252
newly activated variable id: 24717
newly activated variable type: sk
newly activated variable out arcs:
                                   [150]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 45252
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 51670
newly activated variable type: sk
newly activated variable out arcs:
                                   [151]
finding: [1, 1, 1, 1]
Γ151]
arc: 151
variable: 67
variable: 152
activated variable: 51670
activated variable: 46043
newly activated variable id: 51670
newly activated variable type: sk
newly activated variable out arcs:
                                   [151]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 46043
```

```
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 75861
newly activated variable type: ar
newly activated variable out arcs:
                                    [373, 374, 375, 376, 377]
finding: [1, 1, 1, 1]
[373, 374, 375, 376, 377]
arc: 373
variable:
          92
variable:
          300
arc: 374
variable:
variable:
          301
arc: 375
variable:
          92
arc: 376
variable:
          92
variable:
          302
arc: 377
variable: 92
variable: 303
activated variable: 75861
activated variable: 3284000580
activated variable: 75861
activated variable: 3279082732
activated variable: 75861
activated variable: 75861
activated variable: 2127365276
activated variable: 75861
activated variable: 3940108856
newly activated variable id: 75861
newly activated variable type: ar
                                   [373, 374, 375, 376, 377]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 3284000580
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 75861
newly activated variable type: ar
newly activated variable out arcs:
                                   [373, 374, 375, 376, 377]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 3279082732
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 75861
newly activated variable type: ar
newly activated variable out arcs:
                                    [373, 374, 375, 376, 377]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 75861
newly activated variable type: ar
newly activated variable out arcs:
                                    [373, 374, 375, 376, 377]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2127365276
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 75861
newly activated variable type: ar
newly activated variable out arcs:
                                    [373, 374, 375, 376, 377]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 3940108856
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 35491
newly activated variable type: nk
newly activated variable out arcs:
                                    [93, 94]
         [1, 0, 0, 0]
finding:
[93, 94]
arc: 93
variable:
variable:
          104
arc: 94
```

```
variable: 35
variable: 105
activated variable: 35491
activated variable: 40608
activated variable:
                    35491
activated variable: 50930
newly activated variable id: 40608
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 50930
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 35491
newly activated variable type: nk
newly activated variable out arcs:
                                   [93, 94]
finding: [1, 0, 0, 0]
[93, 94]
arc: 93
variable: 35
variable: 104
arc: 94
variable: 35
variable: 105
activated variable: 35491
activated variable: 40608
activated variable: 35491
activated variable: 50930
newly activated variable id: 40608
newly activated variable type: sk plus one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 50930
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 35491
newly activated variable type: nk
newly activated variable out arcs:
                                   [93, 94]
```

```
finding: [1, 0, 0, 0]
[93, 94]
arc: 93
variable:
          35
variable: 104
arc: 94
variable: 35
variable: 105
activated variable: 35491
activated variable: 40608
activated variable:
                    35491
activated variable: 50930
newly activated variable id: 40608
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 50930
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 35491
newly activated variable type: nk
newly activated variable out arcs:
                                   [93, 94]
finding: [1, 1, 1, 1]
[93, 94]
arc: 93
variable:
variable:
         104
arc: 94
variable: 35
variable: 105
activated variable: 35491
activated variable: 40608
activated variable:
                    35491
activated variable: 50930
newly activated variable id: 40608
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 50930
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 35491
newly activated variable type: nk
newly activated variable out arcs:
                                   [93, 94]
finding:
         [1, 1, 1, 1]
[93, 94]
arc: 93
variable:
          35
variable: 104
arc: 94
variable:
          35
variable: 105
activated variable:
                    35491
activated variable: 40608
activated variable:
                    35491
activated variable: 50930
newly activated variable id: 40608
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 50930
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 74972
newly activated variable type: nk
newly activated variable out arcs:
                                    [95, 96]
finding:
         [1, 0, 0, 0]
[95, 96]
arc: 95
variable: 36
variable:
          105
arc: 96
variable: 36
variable: 106
activated variable: 74972
activated variable:
                    50930
activated variable: 74972
activated variable: 18947
newly activated variable id: 50930
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
```

```
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 18947
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 74972
newly activated variable type: nk
newly activated variable out arcs:
                                    [95, 96]
         [1, 0, 0, 0]
finding:
[95, 96]
arc: 95
variable:
variable:
          105
arc: 96
variable: 36
variable: 106
activated variable: 74972
activated variable: 50930
activated variable: 74972
activated variable: 18947
newly activated variable id: 50930
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 18947
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 74972
newly activated variable type: nk
newly activated variable out arcs:
                                   [95, 96]
finding: [1, 0, 0, 0]
[95, 96]
arc: 95
variable: 36
variable: 105
arc: 96
variable:
          36
variable: 106
activated variable: 74972
```

```
activated variable:
                    50930
activated variable: 74972
activated variable: 18947
newly activated variable id: 50930
newly activated variable type: sk plus one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 18947
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 74972
newly activated variable type: nk
newly activated variable out arcs:
                                   [95, 96]
finding: [1, 1, 1, 1]
[95, 96]
arc: 95
variable: 36
variable: 105
arc: 96
variable: 36
variable: 106
activated variable: 74972
activated variable: 50930
activated variable: 74972
activated variable: 18947
newly activated variable id: 50930
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 18947
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 74972
newly activated variable type: nk
newly activated variable out arcs:
                                   [95, 96]
finding:
         [1, 1, 1, 1]
[95, 96]
arc: 95
```

```
variable:
          36
variable: 105
arc: 96
variable: 36
variable: 106
activated variable: 74972
activated variable: 50930
activated variable:
                    74972
activated variable: 18947
newly activated variable id: 50930
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 18947
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 98345
newly activated variable type: nk
newly activated variable out arcs:
                                   [97, 98]
finding: [1, 0, 0, 0]
[97, 98]
arc: 97
variable:
          37
variable:
          106
arc: 98
variable:
variable: 107
activated variable: 98345
activated variable: 18947
activated variable: 98345
activated variable: 44230
newly activated variable id: 18947
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 44230
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
```

```
newly activated variable id: 98345
newly activated variable type: nk
newly activated variable out arcs:
                                   [97, 98]
         [1, 0, 0, 0]
finding:
[97, 98]
arc: 97
variable:
          37
variable: 106
arc: 98
variable:
          37
variable: 107
activated variable: 98345
activated variable: 18947
activated variable: 98345
activated variable: 44230
newly activated variable id: 18947
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 44230
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 98345
newly activated variable type: nk
newly activated variable out arcs:
                                   [97, 98]
         [1, 0, 0, 0]
finding:
[97, 98]
arc: 97
variable: 37
variable:
          106
arc: 98
variable: 37
variable: 107
activated variable: 98345
activated variable: 18947
activated variable: 98345
activated variable: 44230
newly activated variable id: 18947
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
```

```
newly activated variable id: 44230
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 98345
newly activated variable type: nk
newly activated variable out arcs:
                                   [97, 98]
finding:
         [1, 1, 1, 1]
[97, 98]
arc: 97
variable:
          37
variable:
          106
arc: 98
variable: 37
variable: 107
activated variable: 98345
activated variable: 18947
activated variable: 98345
activated variable: 44230
newly activated variable id: 18947
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 44230
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 98345
newly activated variable type: nk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
[97, 98]
arc: 97
variable: 37
variable: 106
arc: 98
variable: 37
variable: 107
activated variable: 98345
activated variable: 18947
activated variable: 98345
activated variable: 44230
```

```
newly activated variable id: 18947
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 44230
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 58644
newly activated variable type: nk
newly activated variable out arcs:
                                    [99, 100]
finding: [1, 0, 0, 0]
[99, 100]
arc: 99
variable:
         38
variable: 108
arc: 100
variable: 38
variable: 107
activated variable: 58644
activated variable: 55699
activated variable: 58644
activated variable: 44230
newly activated variable id: 55699
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 44230
newly activated variable type: sk plus one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 58644
newly activated variable type: nk
newly activated variable out arcs:
                                   [99, 100]
finding: [1, 0, 0, 0]
[99, 100]
arc: 99
variable:
variable:
          108
arc: 100
```

```
variable: 38
variable: 107
activated variable: 58644
activated variable: 55699
activated variable: 58644
activated variable: 44230
newly activated variable id: 55699
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 44230
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 58644
newly activated variable type: nk
newly activated variable out arcs:
                                   [99, 100]
finding: [1, 0, 0, 0]
[99, 100]
arc: 99
variable: 38
variable:
         108
arc: 100
variable: 38
variable: 107
activated variable: 58644
activated variable: 55699
activated variable: 58644
activated variable: 44230
newly activated variable id: 55699
newly activated variable type: sk plus one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 44230
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 58644
newly activated variable type: nk
newly activated variable out arcs:
                                   [99, 100]
```

```
finding: [1, 1, 1, 1]
[99, 100]
arc: 99
variable:
          38
variable: 108
arc: 100
variable:
          38
variable: 107
activated variable: 58644
activated variable: 55699
activated variable: 58644
activated variable: 44230
newly activated variable id: 55699
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 44230
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 58644
newly activated variable type: nk
newly activated variable out arcs:
                                    [99, 100]
finding: [1, 1, 1, 1]
[99, 100]
arc: 99
variable:
variable:
          108
arc: 100
variable: 38
variable: 107
activated variable: 58644
activated variable: 55699
activated variable: 58644
activated variable: 44230
newly activated variable id: 55699
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 44230
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 52209
newly activated variable type: nk
newly activated variable out arcs:
                                   [101, 102]
finding: [1, 0, 0, 0]
[101, 102]
arc: 101
variable:
variable: 109
arc: 102
variable:
          39
variable: 108
activated variable: 52209
activated variable: 49329
activated variable: 52209
activated variable: 55699
newly activated variable id: 49329
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 55699
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 52209
newly activated variable type: nk
newly activated variable out arcs:
                                    [101, 102]
finding: [1, 0, 0, 0]
[101, 102]
arc: 101
variable: 39
variable:
          109
arc: 102
variable: 39
variable: 108
activated variable: 52209
activated variable:
                    49329
activated variable: 52209
activated variable: 55699
newly activated variable id: 49329
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
```

```
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 55699
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 52209
newly activated variable type: nk
newly activated variable out arcs:
                                    [101, 102]
         [1, 0, 0, 0]
finding:
[101, 102]
arc: 101
variable:
variable:
          109
arc: 102
variable: 39
variable: 108
activated variable: 52209
activated variable: 49329
activated variable: 52209
activated variable: 55699
newly activated variable id: 49329
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 55699
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 52209
newly activated variable type: nk
newly activated variable out arcs: [101, 102]
finding: [1, 1, 1, 1]
[101, 102]
arc: 101
variable:
          39
variable:
          109
arc: 102
variable:
          39
variable:
         108
activated variable: 52209
```

```
activated variable:
                    49329
activated variable: 52209
activated variable: 55699
newly activated variable id: 49329
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 55699
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 52209
newly activated variable type: nk
newly activated variable out arcs:
                                   [101, 102]
finding: [1, 1, 1, 1]
[101, 102]
arc: 101
          39
variable:
variable: 109
arc: 102
variable: 39
variable: 108
activated variable: 52209
activated variable: 49329
activated variable: 52209
activated variable: 55699
newly activated variable id: 49329
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 55699
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 80026
newly activated variable type: nk
newly activated variable out arcs:
                                   [103, 104]
finding:
         [1, 0, 0, 0]
[103, 104]
arc: 103
```

```
variable:
          40
variable: 110
arc: 104
variable: 40
variable: 109
activated variable: 80026
activated variable: 29777
activated variable:
                    80026
activated variable: 49329
newly activated variable id: 29777
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 49329
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 80026
newly activated variable type: nk
newly activated variable out arcs:
                                   [103, 104]
finding: [1, 0, 0, 0]
[103, 104]
arc: 103
variable:
          40
variable:
          110
arc: 104
variable:
variable: 109
activated variable: 80026
activated variable: 29777
activated variable: 80026
activated variable: 49329
newly activated variable id: 29777
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Π
count of activated variables: 0
newly activated variable id: 49329
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
```

```
newly activated variable id: 80026
newly activated variable type: nk
newly activated variable out arcs:
                                   [103, 104]
finding: [1, 0, 0, 0]
[103, 104]
arc: 103
variable:
variable:
         110
arc: 104
variable:
variable: 109
activated variable: 80026
activated variable:
                    29777
activated variable: 80026
activated variable: 49329
newly activated variable id: 29777
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 49329
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 80026
newly activated variable type: nk
newly activated variable out arcs:
                                   [103, 104]
finding:
         [1, 1, 1, 1]
[103, 104]
arc: 103
variable:
          40
variable:
          110
arc: 104
variable: 40
variable: 109
activated variable: 80026
activated variable:
                    29777
activated variable: 80026
activated variable: 49329
newly activated variable id: 29777
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 49329
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 80026
newly activated variable type: nk
newly activated variable out arcs:
                                   [103, 104]
finding: [1, 1, 1, 1]
[103, 104]
arc: 103
variable:
variable:
          110
arc: 104
variable: 40
variable: 109
activated variable: 80026
activated variable: 29777
activated variable: 80026
activated variable: 49329
newly activated variable id: 29777
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 49329
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 21087
newly activated variable type: nk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
[105, 106]
arc: 105
variable: 41
variable: 111
arc: 106
variable: 41
variable: 110
activated variable:
                    21087
activated variable: 70523
activated variable:
                    21087
activated variable: 29777
```

```
newly activated variable id: 70523
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 29777
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 21087
newly activated variable type: nk
newly activated variable out arcs:
                                   [105, 106]
finding: [1, 0, 0, 0]
[105, 106]
arc: 105
variable:
         41
variable: 111
arc: 106
variable: 41
variable: 110
activated variable: 21087
activated variable: 70523
activated variable: 21087
activated variable: 29777
newly activated variable id: 70523
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 29777
newly activated variable type: sk plus one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 21087
newly activated variable type: nk
newly activated variable out arcs:
                                   [105, 106]
finding: [1, 0, 0, 0]
[105, 106]
arc: 105
variable:
          41
variable:
          111
arc: 106
```

```
variable: 41
variable: 110
activated variable: 21087
activated variable: 70523
activated variable: 21087
activated variable:
                    29777
newly activated variable id: 70523
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 29777
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 21087
newly activated variable type: nk
newly activated variable out arcs:
                                   [105, 106]
finding: [1, 1, 1, 1]
[105, 106]
arc: 105
variable: 41
variable: 111
arc: 106
variable: 41
variable: 110
activated variable: 21087
activated variable: 70523
activated variable: 21087
activated variable: 29777
newly activated variable id: 70523
newly activated variable type: sk plus one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 29777
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 21087
newly activated variable type: nk
newly activated variable out arcs:
                                   [105, 106]
```

```
finding: [1, 1, 1, 1]
[105, 106]
arc: 105
variable:
          41
variable: 111
arc: 106
variable:
         41
variable: 110
activated variable: 21087
activated variable: 70523
activated variable: 21087
activated variable: 29777
newly activated variable id: 70523
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 29777
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 62779
newly activated variable type: nk
newly activated variable out arcs:
                                    [107, 108]
finding: [1, 0, 0, 0]
[107, 108]
arc: 107
variable:
variable:
          112
arc: 108
variable: 42
variable: 111
activated variable: 62779
activated variable: 49071
activated variable:
                    62779
activated variable: 70523
newly activated variable id: 49071
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 70523
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
```

```
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 62779
newly activated variable type: nk
newly activated variable out arcs:
                                   [107, 108]
finding: [1, 0, 0, 0]
[107, 108]
arc: 107
variable:
variable: 112
arc: 108
variable:
          42
variable: 111
activated variable: 62779
activated variable: 49071
activated variable: 62779
activated variable: 70523
newly activated variable id: 49071
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 70523
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 62779
newly activated variable type: nk
newly activated variable out arcs:
                                    [107, 108]
finding: [1, 0, 0, 0]
[107, 108]
arc: 107
variable: 42
variable:
arc: 108
variable: 42
variable: 111
activated variable: 62779
activated variable:
                    49071
activated variable:
                    62779
activated variable: 70523
newly activated variable id: 49071
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
```

```
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 70523
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 62779
newly activated variable type: nk
                                    [107, 108]
newly activated variable out arcs:
         [1, 1, 1, 1]
finding:
[107, 108]
arc: 107
variable:
variable:
          112
arc: 108
variable: 42
variable: 111
activated variable: 62779
activated variable:
                     49071
activated variable: 62779
activated variable: 70523
newly activated variable id: 49071
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 70523
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 62779
newly activated variable type: nk
newly activated variable out arcs: [107, 108]
finding: [1, 1, 1, 1]
[107, 108]
arc: 107
variable:
          42
variable:
          112
arc: 108
variable:
          42
variable: 111
activated variable: 62779
```

```
activated variable:
                    49071
activated variable: 62779
activated variable: 70523
newly activated variable id: 49071
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 70523
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 16114
newly activated variable type: nk
newly activated variable out arcs:
                                   [109, 110]
finding: [1, 0, 0, 0]
[109, 110]
arc: 109
variable: 43
variable: 113
arc: 110
variable: 43
variable: 112
activated variable: 16114
activated variable: 33993
activated variable:
                    16114
activated variable: 49071
newly activated variable id: 33993
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 49071
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Π
count of activated variables: 0
newly activated variable id: 16114
newly activated variable type: nk
newly activated variable out arcs:
                                   [109, 110]
finding:
         [1, 0, 0, 0]
[109, 110]
arc: 109
```

```
variable:
          43
variable: 113
arc: 110
variable: 43
variable: 112
activated variable: 16114
activated variable: 33993
activated variable:
activated variable: 49071
newly activated variable id: 33993
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 49071
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 16114
newly activated variable type: nk
newly activated variable out arcs:
                                   [109, 110]
finding: [1, 0, 0, 0]
[109, 110]
arc: 109
variable:
          43
variable:
          113
arc: 110
variable:
variable: 112
activated variable: 16114
activated variable: 33993
activated variable: 16114
activated variable: 49071
newly activated variable id: 33993
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 49071
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
```

```
newly activated variable id: 16114
newly activated variable type: nk
newly activated variable out arcs:
                                   [109, 110]
finding: [1, 1, 1, 1]
[109, 110]
arc: 109
variable:
variable: 113
arc: 110
variable:
          43
variable: 112
activated variable: 16114
activated variable: 33993
activated variable: 16114
activated variable: 49071
newly activated variable id: 33993
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 49071
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 16114
newly activated variable type: nk
newly activated variable out arcs:
                                    [109, 110]
finding:
         [1, 1, 1, 1]
[109, 110]
arc: 109
variable: 43
variable:
          113
arc: 110
variable: 43
variable: 112
activated variable: 16114
activated variable: 33993
activated variable: 16114
activated variable: 49071
newly activated variable id: 33993
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 49071
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 30817
newly activated variable type: nk
newly activated variable out arcs: [111, 112]
finding: [1, 0, 0, 0]
[111, 112]
arc: 111
variable:
variable: 113
arc: 112
variable: 44
variable: 102
activated variable: 30817
activated variable: 33993
activated variable: 30817
activated variable: 86388
newly activated variable id: 33993
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 86388
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 30817
newly activated variable type: nk
newly activated variable out arcs:
                                   [111, 112]
finding: [1, 0, 0, 0]
[111, 112]
arc: 111
variable: 44
variable: 113
arc: 112
variable: 44
variable: 102
activated variable:
activated variable: 33993
activated variable:
                    30817
activated variable: 86388
```

```
newly activated variable id: 33993
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 86388
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 30817
newly activated variable type: nk
newly activated variable out arcs:
                                   [111, 112]
finding: [1, 0, 0, 0]
[111, 112]
arc: 111
variable: 44
variable: 113
arc: 112
variable: 44
variable: 102
activated variable: 30817
activated variable: 33993
activated variable:
                    30817
activated variable: 86388
newly activated variable id: 33993
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 86388
newly activated variable type: sk plus one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 30817
newly activated variable type: nk
newly activated variable out arcs:
                                   [111, 112]
finding: [1, 1, 1, 1]
[111, 112]
arc: 111
variable:
variable: 113
arc: 112
```

```
variable: 44
variable: 102
activated variable: 30817
activated variable:
                    33993
activated variable:
                    30817
activated variable: 86388
newly activated variable id: 33993
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 86388
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30817
newly activated variable type: nk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
[111, 112]
arc: 111
variable: 44
variable: 113
arc: 112
variable: 44
variable: 102
activated variable: 30817
activated variable:
                    33993
activated variable: 30817
activated variable: 86388
newly activated variable id: 33993
newly activated variable type: sk plus one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 86388
newly activated variable type: sk_plus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 17113
newly activated variable type: nk
newly activated variable out arcs:
                                   [60, 61, 87]
```

```
finding: [1, 0, 0, 0]
[60, 61]
arc: 60
variable:
          33
variable: 45
arc: 61
variable: 33
variable: 70
activated variable: 17113
activated variable: 18265
activated variable: 17113
activated variable: 78932
newly activated variable id: 18265
newly activated variable type: sk
newly activated variable out arcs:
                                   [113, 114]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 78932
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 17113
newly activated variable type: nk
newly activated variable out arcs:
                                    [60, 61, 87]
finding: [1, 0, 0, 0]
[60, 61]
arc: 60
variable:
variable:
          45
arc: 61
variable: 33
variable: 70
activated variable: 17113
activated variable: 18265
activated variable: 17113
activated variable: 78932
newly activated variable id: 18265
newly activated variable type: sk
newly activated variable out arcs:
                                   [113, 114]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 78932
newly activated variable type: sk
newly activated variable out arcs:
                                    [153]
```

```
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 17113
newly activated variable type: nk
newly activated variable out arcs: [60, 61, 87]
finding: [1, 0, 0, 0]
[60, 61]
arc: 60
variable:
          33
variable: 45
arc: 61
variable:
          33
variable: 70
activated variable: 17113
activated variable: 18265
activated variable: 17113
activated variable: 78932
newly activated variable id: 18265
newly activated variable type: sk
newly activated variable out arcs:
                                   [113, 114]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 78932
newly activated variable type: sk
newly activated variable out arcs:
                                    [153]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 17113
newly activated variable type: nk
newly activated variable out arcs:
                                    [60, 61, 87]
finding: [1, 1, 1, 1]
[60, 61, 87]
arc: 60
variable: 33
variable:
arc: 61
variable: 33
variable: 70
arc: 87
variable: 33
variable: 100
activated variable: 17113
activated variable: 18265
activated variable:
                    17113
activated variable: 78932
```

```
activated variable: 17113
activated variable: 19371
newly activated variable id: 18265
newly activated variable type: sk
newly activated variable out arcs:
                                   [113, 114]
finding: [1, 1, 1, 1]
[113, 114]
arc: 113
variable: 45
variable:
          114
arc: 114
variable: 45
variable: 115
activated variable: 18265
activated variable:
                     18264
activated variable: 18265
activated variable: 54524
newly activated variable id: 18265
newly activated variable type: sk
newly activated variable out arcs:
                                   [113, 114]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 18264
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 18265
newly activated variable type: sk
newly activated variable out arcs:
                                   [113, 114]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 54524
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 78932
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
[153]
arc: 153
variable: 70
```

```
variable: 154
activated variable: 78932
activated variable: 78931
newly activated variable id: 78932
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 78931
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 19371
newly activated variable type: ar
newly activated variable out arcs:
                                   [419, 420, 421, 422, 423]
finding: [1, 1, 1, 1]
[419, 420, 421, 422, 423]
arc: 419
variable: 100
variable:
          336
arc: 420
variable:
         100
variable:
          337
arc: 421
variable:
          100
arc: 422
variable:
          100
variable:
          338
arc: 423
variable:
          100
variable: 339
activated variable: 19371
activated variable: 4377376517
activated variable: 19371
activated variable: 4724145470
activated variable: 19371
activated variable: 19371
activated variable: 3397807662
activated variable: 19371
activated variable: 4377177695
newly activated variable id: 19371
newly activated variable type: ar
newly activated variable out arcs:
                                   [419, 420, 421, 422, 423]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 4377376517
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 19371
newly activated variable type: ar
newly activated variable out arcs:
                                   [419, 420, 421, 422, 423]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4724145470
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 19371
newly activated variable type: ar
newly activated variable out arcs:
                                   [419, 420, 421, 422, 423]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 19371
newly activated variable type: ar
newly activated variable out arcs:
                                   [419, 420, 421, 422, 423]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 3397807662
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 19371
newly activated variable type: ar
newly activated variable out arcs: [419, 420, 421, 422, 423]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4377177695
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 17113
newly activated variable type: nk
newly activated variable out arcs:
                                   [60, 61, 87]
finding: [1, 1, 1, 1]
[60, 61, 87]
arc: 60
variable: 33
variable: 45
arc: 61
variable: 33
variable: 70
arc: 87
variable: 33
variable: 100
activated variable: 17113
activated variable: 18265
activated variable: 17113
activated variable: 78932
activated variable: 17113
activated variable: 19371
newly activated variable id: 18265
newly activated variable type: sk
newly activated variable out arcs:
                                   [113, 114]
finding: [1, 1, 1, 1]
[113, 114]
arc: 113
variable:
          45
variable:
          114
arc: 114
variable:
variable: 115
activated variable: 18265
activated variable: 18264
activated variable: 18265
activated variable: 54524
newly activated variable id: 18265
newly activated variable type: sk
newly activated variable out arcs: [113, 114]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 18264
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 18265
newly activated variable type: sk
newly activated variable out arcs:
                                   [113, 114]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 54524
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 78932
newly activated variable type: sk
newly activated variable out arcs:
                                    [153]
finding: [1, 1, 1, 1]
[153]
arc: 153
variable: 70
variable: 154
activated variable: 78932
activated variable: 78931
newly activated variable id: 78932
newly activated variable type: sk
newly activated variable out arcs: [153]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 78931
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 19371
newly activated variable type: ar
newly activated variable out arcs: [419, 420, 421, 422, 423]
finding: [1, 1, 1, 1]
[419, 420, 421, 422, 423]
arc: 419
variable: 100
variable:
          336
arc: 420
variable:
          100
variable:
          337
arc: 421
variable:
          100
arc: 422
```

```
variable:
         100
variable: 338
arc: 423
variable: 100
variable: 339
activated variable: 19371
activated variable: 4377376517
activated variable: 19371
activated variable: 4724145470
activated variable: 19371
activated variable: 19371
activated variable: 3397807662
activated variable: 19371
activated variable: 4377177695
newly activated variable id: 19371
newly activated variable type: ar
newly activated variable out arcs: [419, 420, 421, 422, 423]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 4377376517
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 19371
newly activated variable type: ar
newly activated variable out arcs:
                                   [419, 420, 421, 422, 423]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4724145470
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 19371
newly activated variable type: ar
newly activated variable out arcs:
                                   [419, 420, 421, 422, 423]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 19371
newly activated variable type: ar
newly activated variable out arcs:
                                   [419, 420, 421, 422, 423]
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 3397807662
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 19371
newly activated variable type: ar
newly activated variable out arcs:
                                   [419, 420, 421, 422, 423]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4377177695
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 20512
newly activated variable type: nk
newly activated variable out arcs:
                                   [47, 48, 80]
         [1, 0, 0, 0]
finding:
[47, 48]
arc: 47
variable:
          26
variable:
          69
arc: 48
variable: 26
variable: 70
activated variable: 20512
activated variable: 68896
activated variable: 20512
activated variable: 78932
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
                                    [152]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 78932
newly activated variable type: sk
newly activated variable out arcs:
                                    [153]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 20512
```

```
newly activated variable type: nk
newly activated variable out arcs:
                                   [47, 48, 80]
         [1, 0, 0, 0]
finding:
[47, 48]
arc: 47
variable:
           26
variable:
          69
arc: 48
variable:
          26
variable: 70
activated variable:
                     20512
activated variable:
                     68896
activated variable:
                     20512
activated variable: 78932
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
                                    [152]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 78932
newly activated variable type: sk
newly activated variable out arcs:
                                    [153]
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 20512
newly activated variable type: nk
                                    [47, 48, 80]
newly activated variable out arcs:
finding:
         [1, 0, 0, 0]
[47, 48]
arc: 47
variable:
          26
variable:
          69
arc: 48
variable:
          26
variable: 70
activated variable: 20512
activated variable: 68896
activated variable: 20512
activated variable: 78932
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
                                    [152]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 78932
```

```
newly activated variable type: sk
newly activated variable out arcs:
                                   [153]
finding: [1, 0, 0, 0]
Π
count of activated variables: 0
newly activated variable id: 20512
newly activated variable type: nk
newly activated variable out arcs:
                                   [47, 48, 80]
finding: [1, 1, 1, 1]
[47, 48, 80]
arc: 47
variable:
          26
variable:
          69
arc: 48
variable:
variable: 70
arc: 80
variable: 26
variable: 93
activated variable: 20512
activated variable: 68896
activated variable:
                    20512
activated variable: 78932
activated variable: 20512
activated variable: 29649
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
[152]
arc: 152
variable: 69
variable: 153
activated variable: 68896
activated variable: 68897
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
                                    [152]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 68897
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 78932
```

```
newly activated variable type: sk
newly activated variable out arcs:
                                   [153]
finding: [1, 1, 1, 1]
[153]
arc: 153
variable:
          70
variable: 154
activated variable: 78932
activated variable: 78931
newly activated variable id: 78932
newly activated variable type: sk
newly activated variable out arcs:
                                    [153]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 78931
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 29649
newly activated variable type: ar
newly activated variable out arcs:
                                    [378, 379, 380]
finding: [1, 1, 1, 1]
[378, 379, 380]
arc: 378
variable:
          93
variable:
          304
arc: 379
variable:
          93
variable:
          305
arc: 380
variable: 93
variable: 306
activated variable: 29649
activated variable: 4724145476
activated variable: 29649
activated variable: 4724145475
activated variable: 29649
activated variable: 4378969891
newly activated variable id: 29649
newly activated variable type: ar
newly activated variable out arcs:
                                    [378, 379, 380]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4724145476
```

```
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 29649
newly activated variable type: ar
newly activated variable out arcs:
                                   [378, 379, 380]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 4724145475
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 29649
newly activated variable type: ar
newly activated variable out arcs:
                                   [378, 379, 380]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4378969891
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 20512
newly activated variable type: nk
newly activated variable out arcs:
                                   [47, 48, 80]
finding: [1, 1, 1, 1]
[47, 48, 80]
arc: 47
variable:
          26
variable: 69
arc: 48
variable: 26
variable: 70
arc: 80
variable:
          26
variable: 93
activated variable: 20512
activated variable:
                    68896
activated variable:
                    20512
activated variable: 78932
activated variable: 20512
```

```
activated variable: 29649
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
                                   [152]
finding: [1, 1, 1, 1]
Γ152]
arc: 152
variable:
          69
variable: 153
activated variable: 68896
activated variable: 68897
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 68897
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 78932
newly activated variable type: sk
newly activated variable out arcs:
                                   [153]
finding: [1, 1, 1, 1]
[153]
arc: 153
variable: 70
variable: 154
activated variable: 78932
activated variable: 78931
newly activated variable id: 78932
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 78931
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 29649
newly activated variable type: ar
newly activated variable out arcs:
                                   [378, 379, 380]
```

```
finding: [1, 1, 1, 1]
[378, 379, 380]
arc: 378
variable:
          93
variable: 304
arc: 379
variable: 93
variable: 305
arc: 380
variable:
          93
variable: 306
activated variable: 29649
activated variable: 4724145476
activated variable: 29649
activated variable: 4724145475
activated variable: 29649
activated variable: 4378969891
newly activated variable id: 29649
newly activated variable type: ar
newly activated variable out arcs:
                                   [378, 379, 380]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4724145476
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 29649
newly activated variable type: ar
newly activated variable out arcs:
                                   [378, 379, 380]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4724145475
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 29649
newly activated variable type: ar
newly activated variable out arcs:
                                    [378, 379, 380]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4378969891
```

```
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 96010
newly activated variable type: nk
newly activated variable out arcs:
                                   [49, 50, 81]
         [1, 0, 0, 0]
finding:
[49, 50]
arc: 49
variable:
          27
variable:
          71
variable:
         157
arc: 50
variable:
          27
variable:
activated variable: 96010
activated variable: 82418
activated variable: 82418
activated variable: 96010
activated variable: 68896
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs: [154, 155]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 96010
newly activated variable type: nk
newly activated variable out arcs:
                                   [49, 50, 81]
finding:
         [1, 0, 0, 0]
[49, 50]
arc: 49
variable: 27
variable: 71
```

```
variable: 157
arc: 50
variable:
          27
variable: 69
activated variable: 96010
activated variable: 82418
activated variable: 82418
activated variable:
                    96010
activated variable: 68896
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
                                    [152]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 96010
newly activated variable type: nk
newly activated variable out arcs:
                                    [49, 50, 81]
         [1, 0, 0, 0]
finding:
[49, 50]
arc: 49
variable:
          27
variable: 71
variable: 157
arc: 50
variable:
variable: 69
activated variable: 96010
activated variable: 82418
activated variable: 82418
activated variable:
                    96010
activated variable: 68896
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 0, 0, 0]
```

```
Π
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
                                   [152]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 96010
newly activated variable type: nk
newly activated variable out arcs: [49, 50, 81]
finding: [1, 1, 1, 1]
[49, 50, 81]
arc: 49
variable: 27
variable:
          71
variable: 157
arc: 50
variable: 27
variable:
         69
arc: 81
variable: 27
variable: 94
activated variable: 96010
activated variable: 82418
activated variable: 82418
activated variable: 96010
activated variable: 68896
activated variable: 96010
activated variable: 21832
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs: [154, 155]
finding: [1, 1, 1, 1]
[154, 155]
arc: 154
variable:
          71
variable:
          157
variable:
          155
arc: 155
variable: 71
variable: 157
```

```
variable: 155
activated variable: 82418
activated variable: 82418
activated variable: 82417
activated variable: 82418
activated variable: 82418
activated variable: 82417
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82417
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 82417
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
                                    [152]
finding: [1, 1, 1, 1]
Γ152]
arc: 152
variable:
          69
variable: 153
activated variable: 68896
activated variable: 68897
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 68897
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 21832
newly activated variable type: ar
newly activated variable out arcs:
                                    [381]
finding: [1, 1, 1, 1]
[381]
arc: 381
variable: 94
variable:
          307
activated variable: 21832
activated variable: 3397807673
newly activated variable id: 21832
newly activated variable type: ar
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 3397807673
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 96010
newly activated variable type: nk
newly activated variable out arcs:
                                   [49, 50, 81]
```

```
finding: [1, 1, 1, 1]
[49, 50, 81]
arc: 49
variable: 27
variable: 71
variable: 157
arc: 50
variable: 27
variable: 69
arc: 81
variable: 27
variable: 94
activated variable: 96010
activated variable: 82418
activated variable: 82418
activated variable: 96010
activated variable: 68896
activated variable: 96010
activated variable: 21832
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 1, 1, 1]
[154, 155]
arc: 154
variable:
         71
variable: 157
variable:
          155
arc: 155
variable: 71
variable:
          157
variable: 155
activated variable: 82418
activated variable: 82418
activated variable: 82417
activated variable: 82418
activated variable: 82418
activated variable: 82417
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 82417
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 82417
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
[152]
arc: 152
variable: 69
variable: 153
activated variable: 68896
activated variable: 68897
newly activated variable id: 68896
newly activated variable type: sk
newly activated variable out arcs:
                                   [152]
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 68897
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 21832
newly activated variable type: ar
newly activated variable out arcs:
                                   [381]
finding: [1, 1, 1, 1]
[381]
arc: 381
variable:
          94
variable: 307
activated variable: 21832
activated variable: 3397807673
newly activated variable id: 21832
newly activated variable type: ar
newly activated variable out arcs:
                                    [381]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 3397807673
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 56555
newly activated variable type: nk
newly activated variable out arcs:
                                   [51, 52, 82]
finding:
         [1, 0, 0, 0]
[51, 52]
arc: 51
variable: 28
variable: 71
variable: 157
arc: 52
variable: 28
variable: 72
activated variable: 56555
activated variable: 82418
activated variable:
                    82418
activated variable: 56555
activated variable: 30015
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
```

```
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk minus one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                   [156, 157, 158]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 56555
newly activated variable type: nk
newly activated variable out arcs:
                                   [51, 52, 82]
finding: [1, 0, 0, 0]
[51, 52]
arc: 51
variable:
          28
variable: 71
variable: 157
arc: 52
variable: 28
variable: 72
activated variable: 56555
activated variable: 82418
activated variable: 82418
activated variable: 56555
activated variable: 30015
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                   [156, 157, 158]
finding: [1, 0, 0, 0]
```

```
Π
count of activated variables: 0
newly activated variable id: 56555
newly activated variable type: nk
newly activated variable out arcs:
                                   [51, 52, 82]
         [1, 0, 0, 0]
finding:
[51, 52]
arc: 51
variable:
          28
variable:
          71
variable: 157
arc: 52
variable:
           28
variable: 72
activated variable:
                     56555
activated variable: 82418
activated variable: 82418
activated variable: 56555
activated variable: 30015
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs: [156, 157, 158]
finding: [1, 0, 0, 0]
Π
count of activated variables: 0
newly activated variable id: 56555
newly activated variable type: nk
newly activated variable out arcs: [51, 52, 82]
finding: [1, 1, 1, 1]
[51, 52, 82]
arc: 51
variable:
          28
variable:
variable:
          157
arc: 52
variable: 28
```

```
variable: 72
arc: 82
variable:
          28
variable: 95
activated variable: 56555
activated variable: 82418
activated variable: 82418
activated variable: 56555
activated variable: 30015
activated variable: 56555
activated variable: 32028
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 1, 1, 1]
[154, 155]
arc: 154
variable:
          71
variable:
         157
variable: 155
arc: 155
variable: 71
variable: 157
variable: 155
activated variable: 82418
activated variable: 82418
activated variable: 82417
activated variable: 82418
activated variable: 82418
activated variable: 82417
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 82417
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82417
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                   [156, 157, 158]
finding: [1, 1, 1, 1]
[156, 157, 158]
arc: 156
variable:
variable:
          156
arc: 157
variable: 72
variable:
         71
variable: 157
arc: 158
variable:
variable: 158
activated variable: 30015
activated variable: 31743
activated variable: 30015
activated variable: 82418
activated variable: 82418
activated variable: 30015
activated variable: 30014
newly activated variable id: 30015
newly activated variable type: sk
```

```
newly activated variable out arcs: [156, 157, 158]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 31743
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                    [156, 157, 158]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
                                   [156, 157, 158]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30014
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                    [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
[382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392]
arc: 382
variable: 95
```

variable: 308 arc: 383 variable: 95 variable: 309 arc: 384 variable: 95 variable: 307 arc: 385 variable: 95 variable: 310 arc: 386 variable: 95 variable: 311 arc: 387 variable: 95 variable: 312 arc: 388 variable: 95 arc: 389 variable: 95 variable: 313 arc: 390 variable: 95 variable: 314 arc: 391 variable: 95 arc: 392 variable: 95 315 variable: activated variable: 32028 activated variable: 4637296089 activated variable: 32028 activated variable: 4637296094 activated variable: 32028 activated variable: 3397807673 activated variable: 32028 activated variable: 4715037748 activated variable: 32028 activated variable: 4637296090

activated variable: 32028 activated variable: 2267274312 activated variable: 32028 activated variable: 32028 activated variable: 4637296092 activated variable: 32028 activated variable: 2267274305 activated variable: 32028 activated variable: 32028

```
activated variable: 4637296091
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                    [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637296089
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs: [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637296094
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                    [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 3397807673
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
                                    [382, 383, 384, 385, 386, 387, 388, 389,
newly activated variable out arcs:
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715037748
```

```
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                    [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637296090
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                   [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2267274312
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs: [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                   [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4637296092
newly activated variable type: feature
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                   [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2267274305
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                    [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                    [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637296091
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 56555
newly activated variable type: nk
newly activated variable out arcs: [51, 52, 82]
finding: [1, 1, 1, 1]
[51, 52, 82]
arc: 51
variable: 28
variable: 71
variable:
          157
arc: 52
variable: 28
variable: 72
```

```
arc: 82
variable:
          28
variable: 95
activated variable: 56555
activated variable: 82418
activated variable: 82418
activated variable: 56555
activated variable: 30015
activated variable: 56555
activated variable: 32028
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 1, 1, 1]
[154, 155]
arc: 154
variable:
          71
variable: 157
variable: 155
arc: 155
variable: 71
variable: 157
variable: 155
activated variable: 82418
activated variable: 82418
activated variable: 82417
activated variable: 82418
activated variable: 82418
activated variable: 82417
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82417
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
```

```
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 82417
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                   [156, 157, 158]
finding: [1, 1, 1, 1]
[156, 157, 158]
arc: 156
variable:
variable:
          156
arc: 157
variable:
          72
variable: 71
variable:
          157
arc: 158
variable: 72
variable: 158
activated variable: 30015
activated variable: 31743
activated variable: 30015
activated variable: 82418
activated variable: 82418
activated variable: 30015
activated variable: 30014
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                   [156, 157, 158]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 31743
newly activated variable type: sk minus one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                    [156, 157, 158]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                    [154, 155]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                    [156, 157, 158]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 30014
newly activated variable type: sk minus one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                   [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
[382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392]
arc: 382
variable: 95
variable: 308
```

arc: 383 variable: 95 variable: 309 arc: 384 variable: 95 variable: 307 arc: 385 variable: 95 variable: 310 arc: 386 variable: 95 variable: 311 arc: 387 variable: 95 variable: 312 arc: 388 variable: 95 arc: 389 variable: 95 variable: 313 arc: 390 variable: variable: 314 arc: 391 variable: 95 arc: 392 variable: 95 variable: 315 activated variable: 32028 activated variable: 4637296089 activated variable: 32028 activated variable: 4637296094 activated variable: 32028 activated variable: 3397807673 activated variable: 32028 activated variable: 4715037748 activated variable: 32028 activated variable: 4637296090 activated variable: 32028 activated variable: 2267274312 activated variable: 32028 activated variable: 32028

activated variable: 4637296092 activated variable: 32028 activated variable: 2267274305 activated variable: 32028 activated variable: 32028 activated variable: 4637296091

```
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                    [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637296089
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                    [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 4637296094
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                    [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 3397807673
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs: [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715037748
newly activated variable type: feature
```

```
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                    [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4637296090
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs: [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2267274312
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                    [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs: [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637296092
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                    [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 2267274305
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                    [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32028
newly activated variable type: ar
newly activated variable out arcs:
                                   [382, 383, 384, 385, 386, 387, 388, 389,
390, 391, 392]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637296091
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 44115
newly activated variable type: nk
newly activated variable out arcs:
                                    [53, 54, 83]
finding: [1, 0, 0, 0]
[53, 54]
arc: 53
variable:
          29
variable:
          73
variable:
          161
arc: 54
variable:
          29
variable: 72
activated variable: 44115
```

```
activated variable:
                    31742
activated variable: 31742
activated variable: 44115
activated variable: 30015
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                    [156, 157, 158]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 44115
newly activated variable type: nk
newly activated variable out arcs: [53, 54, 83]
finding:
         [1, 0, 0, 0]
[53, 54]
arc: 53
variable: 29
variable: 73
variable:
         161
arc: 54
variable: 29
variable: 72
activated variable: 44115
activated variable: 31742
activated variable: 31742
activated variable: 44115
activated variable: 30015
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
```

```
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                   [156, 157, 158]
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 44115
newly activated variable type: nk
newly activated variable out arcs:
                                    [53, 54, 83]
         [1, 0, 0, 0]
finding:
[53, 54]
arc: 53
variable:
          29
variable:
          73
variable: 161
arc: 54
variable:
          29
variable: 72
activated variable: 44115
activated variable: 31742
activated variable: 31742
activated variable: 44115
activated variable: 30015
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                    [156, 157, 158]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 44115
newly activated variable type: nk
newly activated variable out arcs:
                                    [53, 54, 83]
finding: [1, 1, 1, 1]
```

```
[53, 54, 83]
arc: 53
variable:
          29
variable:
          73
variable: 161
arc: 54
variable:
         29
variable: 72
arc: 83
variable:
          29
variable: 96
activated variable: 44115
activated variable: 31742
activated variable: 31742
activated variable: 44115
activated variable: 30015
activated variable: 44115
activated variable: 32932
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                   [156, 157, 158]
finding: [1, 1, 1, 1]
[156, 157, 158]
arc: 156
variable: 72
variable:
          156
arc: 157
variable: 72
variable: 71
variable:
         157
arc: 158
variable: 72
variable:
          158
activated variable: 30015
activated variable:
                    31743
activated variable: 30015
```

```
activated variable: 82418
activated variable: 82418
activated variable: 30015
activated variable: 30014
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                   [156, 157, 158]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 31743
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                   [156, 157, 158]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs: [154, 155]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs: [156, 157, 158]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 30014
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
```

```
newly activated variable out arcs: [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
[393, 394, 395, 396, 397, 398, 399]
arc: 393
variable: 96
variable:
          316
arc: 394
variable:
          96
variable: 317
arc: 395
variable:
          96
variable:
          318
arc: 396
variable:
          96
variable:
          319
arc: 397
variable:
          96
variable:
          320
arc: 398
variable:
          96
variable:
          321
arc: 399
variable: 96
variable: 322
activated variable: 32932
activated variable: 4637296098
activated variable:
                    32932
activated variable: 4637296097
activated variable:
                    32932
activated variable: 4637296096
activated variable: 32932
activated variable: 4637296095
activated variable: 32932
activated variable: 4715039297
activated variable: 32932
activated variable: 4715039296
activated variable: 32932
activated variable: 4715039295
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs: [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637296098
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs:
                                    [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637296097
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs:
                                   [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 4637296096
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs:
                                   [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4637296095
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs:
                                   [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715039297
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs:
                                   [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715039296
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs: [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715039295
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 44115
newly activated variable type: nk
newly activated variable out arcs:
                                   [53, 54, 83]
finding: [1, 1, 1, 1]
[53, 54, 83]
arc: 53
variable:
         29
variable: 73
variable:
         161
arc: 54
variable: 29
variable:
arc: 83
variable: 29
variable: 96
activated variable: 44115
activated variable:
                    31742
activated variable: 31742
activated variable:
                    44115
activated variable: 30015
activated variable: 44115
activated variable: 32932
```

```
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
                                   finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                   [156, 157, 158]
finding: [1, 1, 1, 1]
[156, 157, 158]
arc: 156
variable:
          72
variable:
          156
arc: 157
variable:
variable: 71
variable:
          157
arc: 158
variable: 72
variable: 158
activated variable: 30015
activated variable:
                    31743
activated variable: 30015
activated variable: 82418
activated variable: 82418
activated variable: 30015
activated variable: 30014
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs: [156, 157, 158]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 31743
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
```

```
newly activated variable out arcs: [156, 157, 158]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk
newly activated variable out arcs:
                                   [154, 155]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 82418
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30015
newly activated variable type: sk
newly activated variable out arcs:
                                   [156, 157, 158]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 30014
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs:
                                   [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
[393, 394, 395, 396, 397, 398, 399]
arc: 393
variable:
          96
variable:
          316
arc: 394
variable:
variable: 317
arc: 395
variable: 96
variable:
          318
arc: 396
variable:
         96
variable:
          319
arc: 397
variable: 96
variable: 320
```

```
arc: 398
variable:
          96
variable:
          321
arc: 399
variable: 96
variable: 322
activated variable: 32932
activated variable: 4637296098
activated variable: 32932
activated variable: 4637296097
activated variable: 32932
activated variable: 4637296096
activated variable: 32932
activated variable: 4637296095
activated variable:
                    32932
activated variable: 4715039297
activated variable: 32932
activated variable: 4715039296
activated variable: 32932
activated variable: 4715039295
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs:
                                   [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 4637296098
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs:
                                   [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 4637296097
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs:
                                   [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 4637296096
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs:
                                   [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637296095
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs:
                                   [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 4715039297
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs:
                                    [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4715039296
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 32932
newly activated variable type: ar
newly activated variable out arcs:
                                    [393, 394, 395, 396, 397, 398, 399]
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 4715039295
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 64657
newly activated variable type: nk
newly activated variable out arcs:
                                   [55, 56, 84]
         [1, 0, 0, 0]
finding:
[55, 56]
arc: 55
variable:
          30
variable: 74
variable:
         162
arc: 56
variable: 30
variable: 73
variable: 161
activated variable: 64657
activated variable: 69894
activated variable: 69894
activated variable: 64657
activated variable: 31742
activated variable: 31742
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk minus one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
```

```
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 64657
newly activated variable type: nk
newly activated variable out arcs: [55, 56, 84]
finding:
         [1, 0, 0, 0]
[55, 56]
arc: 55
variable:
          74
variable:
variable:
         162
arc: 56
variable:
          30
          73
variable:
variable: 161
activated variable: 64657
activated variable: 69894
activated variable: 69894
activated variable: 64657
activated variable: 31742
activated variable: 31742
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs: [159, 160, 161]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 64657
newly activated variable type: nk
```

```
newly activated variable out arcs: [55, 56, 84]
finding: [1, 0, 0, 0]
[55, 56]
arc: 55
variable:
          30
variable:
          74
variable: 162
arc: 56
variable: 30
variable: 73
variable: 161
activated variable: 64657
activated variable: 69894
activated variable: 69894
activated variable:
                     64657
activated variable: 31742
activated variable: 31742
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs: [159, 160, 161]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 64657
newly activated variable type: nk
newly activated variable out arcs:
                                    [55, 56, 84]
finding: [1, 1, 1, 1]
[55, 56, 84]
arc: 55
variable: 30
```

```
variable: 74
variable: 162
arc: 56
variable: 30
variable: 73
variable: 161
arc: 84
variable: 30
variable: 97
activated variable: 64657
activated variable:
                    69894
activated variable: 69894
activated variable: 64657
activated variable: 31742
activated variable:
                    31742
activated variable: 64657
activated variable: 83471
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs: [159, 160, 161]
finding: [1, 1, 1, 1]
[159, 160, 161]
arc: 159
variable:
variable: 162
variable: 159
arc: 160
variable: 74
variable: 162
variable: 160
arc: 161
variable: 74
variable: 162
variable: 73
variable: 161
activated variable: 69894
activated variable: 69894
activated variable: 69897
activated variable: 69894
activated variable: 69894
activated variable: 49894
activated variable: 69894
activated variable: 69894
activated variable: 31742
activated variable: 31742
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                  [159, 160, 161]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk minus one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 69897
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                    [159, 160, 161]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 49894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk minus one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
newly activated variable out arcs:
                                    [400, 401, 402, 403, 404, 405, 406]
finding: [1, 1, 1, 1]
[400, 401, 402, 403, 404, 405, 406]
arc: 400
variable: 97
variable:
          323
arc: 401
variable: 97
variable:
arc: 402
variable:
          97
variable:
          320
arc: 403
variable:
          97
          318
variable:
arc: 404
variable:
          97
variable:
          322
arc: 405
```

```
variable:
          97
variable: 321
arc: 406
variable: 97
variable: 319
activated variable: 83471
activated variable: 4715306048
activated variable: 83471
activated variable: 4637296097
activated variable: 83471
activated variable: 4715039297
activated variable: 83471
activated variable: 4637296096
activated variable: 83471
activated variable: 4715039295
activated variable: 83471
activated variable: 4715039296
activated variable: 83471
activated variable: 4637296095
newly activated variable id: 83471
newly activated variable type: ar
newly activated variable out arcs:
                                   [400, 401, 402, 403, 404, 405, 406]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715306048
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
newly activated variable out arcs: [400, 401, 402, 403, 404, 405, 406]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 4637296097
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
newly activated variable out arcs:
                                   [400, 401, 402, 403, 404, 405, 406]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 4715039297
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
newly activated variable out arcs:
                                   [400, 401, 402, 403, 404, 405, 406]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4637296096
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
                                   [400, 401, 402, 403, 404, 405, 406]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715039295
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
newly activated variable out arcs: [400, 401, 402, 403, 404, 405, 406]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 4715039296
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
newly activated variable out arcs:
                                   [400, 401, 402, 403, 404, 405, 406]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 4637296095
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 64657
newly activated variable type: nk
newly activated variable out arcs:
                                   [55, 56, 84]
finding: [1, 1, 1, 1]
[55, 56, 84]
arc: 55
          30
variable:
          74
variable:
variable: 162
arc: 56
variable: 30
variable: 73
variable: 161
arc: 84
variable: 30
variable: 97
activated variable: 64657
activated variable: 69894
activated variable: 69894
activated variable: 64657
activated variable: 31742
activated variable: 31742
activated variable: 64657
activated variable: 83471
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs: [159, 160, 161]
finding: [1, 1, 1, 1]
[159, 160, 161]
arc: 159
variable: 74
variable: 162
variable:
         159
arc: 160
variable: 74
variable: 162
variable:
         160
arc: 161
variable:
         74
variable: 162
variable: 73
```

```
variable: 161
activated variable: 69894
activated variable: 69894
activated variable: 69897
activated variable: 69894
activated variable: 69894
activated variable: 49894
activated variable: 69894
activated variable: 69894
activated variable: 31742
activated variable: 31742
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69897
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 49894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
```

```
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
                                    [400, 401, 402, 403, 404, 405, 406]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
[400, 401, 402, 403, 404, 405, 406]
arc: 400
variable: 97
```

```
variable:
          323
arc: 401
variable:
          97
variable: 317
arc: 402
variable:
          97
variable:
          320
arc: 403
variable: 97
variable:
          318
arc: 404
variable: 97
variable:
          322
arc: 405
variable: 97
variable: 321
arc: 406
variable: 97
variable: 319
activated variable: 83471
activated variable: 4715306048
activated variable: 83471
activated variable: 4637296097
activated variable: 83471
activated variable: 4715039297
activated variable: 83471
activated variable: 4637296096
activated variable: 83471
activated variable: 4715039295
activated variable: 83471
activated variable: 4715039296
activated variable: 83471
activated variable: 4637296095
newly activated variable id: 83471
newly activated variable type: ar
newly activated variable out arcs: [400, 401, 402, 403, 404, 405, 406]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715306048
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
newly activated variable out arcs:
                                   [400, 401, 402, 403, 404, 405, 406]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4637296097
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
newly activated variable out arcs:
                                    [400, 401, 402, 403, 404, 405, 406]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715039297
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
                                    [400, 401, 402, 403, 404, 405, 406]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4637296096
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
                                    [400, 401, 402, 403, 404, 405, 406]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715039295
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
newly activated variable out arcs:
                                    [400, 401, 402, 403, 404, 405, 406]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4715039296
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 83471
newly activated variable type: ar
                                    [400, 401, 402, 403, 404, 405, 406]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637296095
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 95224
newly activated variable type: nk
newly activated variable out arcs:
                                   [62, 63, 88]
finding: [1, 0, 0, 0]
[62, 63]
arc: 62
variable:
          34
          75
variable:
arc: 63
variable:
variable: 74
variable: 162
activated variable: 95224
activated variable: 30508
activated variable:
                    95224
activated variable: 69894
activated variable: 69894
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                    [162, 163]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                    [159, 160, 161]
finding: [1, 0, 0, 0]
```

```
Π
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 95224
newly activated variable type: nk
newly activated variable out arcs:
                                   [62, 63, 88]
finding:
         [1, 0, 0, 0]
[62, 63]
arc: 62
variable:
variable: 75
arc: 63
variable: 34
variable: 74
variable: 162
activated variable: 95224
activated variable:
                    30508
activated variable: 95224
activated variable: 69894
activated variable: 69894
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs: [159, 160, 161]
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 95224
newly activated variable type: nk
newly activated variable out arcs:
                                   [62, 63, 88]
finding: [1, 0, 0, 0]
[62, 63]
```

```
arc: 62
variable:
          34
variable:
          75
arc: 63
variable: 34
variable:
          74
variable: 162
activated variable: 95224
activated variable: 30508
activated variable: 95224
activated variable: 69894
activated variable: 69894
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 95224
newly activated variable type: nk
newly activated variable out arcs:
                                   [62, 63, 88]
finding: [1, 1, 1, 1]
[62, 63, 88]
arc: 62
variable:
variable:
arc: 63
variable: 34
variable: 74
variable: 162
arc: 88
variable: 34
variable: 101
activated variable: 95224
activated variable:
                    30508
activated variable: 95224
```

```
activated variable:
                    69894
activated variable: 69894
activated variable: 95224
activated variable: 60801
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding: [1, 1, 1, 1]
[162, 163]
arc: 162
variable: 75
variable: 74
variable: 162
arc: 163
variable: 75
variable: 163
activated variable: 30508
activated variable: 69894
activated variable: 69894
activated variable: 30508
activated variable: 30507
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk minus one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 30507
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs: [159, 160, 161]
finding: [1, 1, 1, 1]
[159, 160, 161]
arc: 159
variable:
          74
variable:
          162
variable:
          159
arc: 160
          74
variable:
variable:
variable:
          160
arc: 161
variable:
          74
variable:
          162
variable: 73
variable: 161
activated variable: 69894
activated variable: 69894
activated variable: 69897
activated variable: 69894
activated variable: 69894
activated variable: 49894
activated variable: 69894
activated variable:
                     69894
activated variable: 31742
activated variable:
                    31742
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs: [159, 160, 161]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69897
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 49894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 60801
newly activated variable type: ar
newly activated variable out arcs:
                                    [424]
finding: [1, 1, 1, 1]
[424]
arc: 424
variable: 101
variable: 340
activated variable: 60801
activated variable: 4715306049
newly activated variable id: 60801
newly activated variable type: ar
newly activated variable out arcs:
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4715306049
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 95224
newly activated variable type: nk
newly activated variable out arcs:
                                   [62, 63, 88]
finding: [1, 1, 1, 1]
[62, 63, 88]
arc: 62
variable:
variable:
arc: 63
variable:
          34
variable: 74
variable:
          162
arc: 88
variable: 34
variable: 101
activated variable: 95224
activated variable: 30508
activated variable: 95224
activated variable: 69894
activated variable:
                     69894
activated variable: 95224
activated variable: 60801
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                    [162, 163]
```

```
finding: [1, 1, 1, 1]
[162, 163]
arc: 162
variable:
          75
variable: 74
variable: 162
arc: 163
variable: 75
variable: 163
activated variable: 30508
activated variable: 69894
activated variable: 69894
activated variable: 30508
activated variable: 30507
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 30507
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                    [159, 160, 161]
finding: [1, 1, 1, 1]
```

```
[159, 160, 161]
arc: 159
variable:
          74
variable:
          162
variable: 159
arc: 160
variable: 74
variable: 162
variable: 160
arc: 161
variable: 74
variable: 162
variable: 73
variable: 161
activated variable: 69894
activated variable: 69894
activated variable: 69897
activated variable: 69894
activated variable: 69894
activated variable: 49894
activated variable: 69894
activated variable: 69894
activated variable: 31742
activated variable: 31742
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69897
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs: [159, 160, 161]
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 49894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk minus one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 31742
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 60801
newly activated variable type: ar
newly activated variable out arcs:
                                    [424]
finding: [1, 1, 1, 1]
[424]
arc: 424
```

```
variable: 101
variable: 340
activated variable: 60801
activated variable: 4715306049
newly activated variable id: 60801
newly activated variable type: ar
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715306049
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 83557
newly activated variable type: nk
newly activated variable out arcs:
                                   [57, 58, 85]
finding:
         [1, 0, 0, 0]
[57, 58]
arc: 57
variable:
variable:
arc: 58
variable: 31
variable: 76
activated variable: 83557
activated variable:
                    30508
activated variable: 83557
activated variable: 15360
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs: [164, 165]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 83557
newly activated variable type: nk
newly activated variable out arcs:
                                   [57, 58, 85]
finding: [1, 0, 0, 0]
[57, 58]
```

```
arc: 57
variable:
          31
variable:
          75
arc: 58
variable: 31
variable: 76
activated variable: 83557
activated variable:
                    30508
activated variable: 83557
activated variable: 15360
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 15360
newly activated variable type: sk
                                    [164, 165]
newly activated variable out arcs:
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 83557
newly activated variable type: nk
newly activated variable out arcs: [57, 58, 85]
         [1, 0, 0, 0]
finding:
[57, 58]
arc: 57
variable:
          31
variable: 75
arc: 58
variable: 31
variable: 76
activated variable: 83557
activated variable: 30508
activated variable: 83557
activated variable: 15360
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs: [162, 163]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                   [164, 165]
finding: [1, 0, 0, 0]
```

```
count of activated variables: 0
newly activated variable id: 83557
newly activated variable type: nk
newly activated variable out arcs:
                                   [57, 58, 85]
finding: [1, 1, 1, 1]
[57, 58, 85]
arc: 57
variable: 31
variable: 75
arc: 58
variable: 31
variable: 76
arc: 85
variable:
         31
variable: 98
activated variable: 83557
activated variable: 30508
activated variable: 83557
activated variable: 15360
activated variable: 83557
activated variable: 40446
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding: [1, 1, 1, 1]
[162, 163]
arc: 162
variable:
          75
          74
variable:
variable:
         162
arc: 163
variable: 75
variable: 163
activated variable: 30508
activated variable: 69894
activated variable:
                    69894
activated variable: 30508
activated variable: 30507
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 1, 1, 1]
```

```
Π
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30507
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                   [164, 165]
finding: [1, 1, 1, 1]
[164, 165]
arc: 164
variable: 76
variable:
         164
arc: 165
variable: 76
variable: 165
activated variable: 15360
activated variable: 15361
activated variable: 15360
activated variable: 72398
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                   [164, 165]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 15361
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 15360
```

```
newly activated variable type: sk
newly activated variable out arcs:
                                   [164, 165]
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 72398
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 40446
newly activated variable type: ar
newly activated variable out arcs:
                                   [407, 408, 409, 410, 411]
finding: [1, 1, 1, 1]
[407, 408, 409, 410, 411]
arc: 407
variable:
          98
variable: 324
arc: 408
variable: 98
variable: 325
arc: 409
variable:
         98
variable: 326
arc: 410
variable:
          98
variable: 327
arc: 411
variable: 98
         328
variable:
activated variable: 40446
activated variable: 4720339167
activated variable: 40446
activated variable: 4637527905
activated variable: 40446
activated variable: 4637527909
activated variable: 40446
activated variable: 4637527904
activated variable: 40446
activated variable: 4637527756
newly activated variable id: 40446
newly activated variable type: ar
newly activated variable out arcs:
                                   [407, 408, 409, 410, 411]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4720339167
```

```
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 40446
newly activated variable type: ar
newly activated variable out arcs:
                                    [407, 408, 409, 410, 411]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 4637527905
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 40446
newly activated variable type: ar
newly activated variable out arcs:
                                   [407, 408, 409, 410, 411]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 4637527909
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 40446
newly activated variable type: ar
newly activated variable out arcs:
                                   [407, 408, 409, 410, 411]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637527904
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 40446
newly activated variable type: ar
newly activated variable out arcs:
                                    [407, 408, 409, 410, 411]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637527756
```

```
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 83557
newly activated variable type: nk
newly activated variable out arcs:
                                    [57, 58, 85]
finding: [1, 1, 1, 1]
[57, 58, 85]
arc: 57
variable:
          31
          75
variable:
arc: 58
variable:
variable:
arc: 85
variable:
         31
variable: 98
activated variable: 83557
activated variable: 30508
activated variable: 83557
activated variable: 15360
activated variable: 83557
activated variable: 40446
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding:
         [1, 1, 1, 1]
[162, 163]
arc: 162
variable:
          75
variable:
          74
variable:
         162
arc: 163
variable:
          75
variable: 163
activated variable: 30508
activated variable: 69894
activated variable:
                    69894
activated variable: 30508
activated variable: 30507
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                   [162, 163]
finding: [1, 1, 1, 1]
count of activated variables: 0
```

```
newly activated variable id: 69894
newly activated variable type: sk
newly activated variable out arcs:
                                   [159, 160, 161]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 69894
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30508
newly activated variable type: sk
newly activated variable out arcs:
                                    [162, 163]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 30507
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                    [164, 165]
finding:
         [1, 1, 1, 1]
[164, 165]
arc: 164
variable:
variable:
          164
arc: 165
variable: 76
variable: 165
activated variable: 15360
activated variable: 15361
activated variable: 15360
activated variable: 72398
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                   [164, 165]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 15361
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                   [164, 165]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 72398
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 40446
newly activated variable type: ar
newly activated variable out arcs:
                                   [407, 408, 409, 410, 411]
finding: [1, 1, 1, 1]
[407, 408, 409, 410, 411]
arc: 407
variable:
variable:
          324
arc: 408
variable: 98
variable:
          325
arc: 409
variable:
          98
variable:
          326
arc: 410
variable:
          98
variable:
          327
arc: 411
variable: 98
variable: 328
activated variable: 40446
activated variable: 4720339167
activated variable: 40446
activated variable: 4637527905
activated variable: 40446
activated variable: 4637527909
activated variable: 40446
activated variable: 4637527904
activated variable: 40446
activated variable: 4637527756
newly activated variable id: 40446
newly activated variable type: ar
newly activated variable out arcs:
                                   [407, 408, 409, 410, 411]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4720339167
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 40446
newly activated variable type: ar
                                    [407, 408, 409, 410, 411]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637527905
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 40446
newly activated variable type: ar
newly activated variable out arcs:
                                   [407, 408, 409, 410, 411]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4637527909
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 40446
newly activated variable type: ar
newly activated variable out arcs:
                                    [407, 408, 409, 410, 411]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4637527904
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 40446
newly activated variable type: ar
newly activated variable out arcs:
                                   [407, 408, 409, 410, 411]
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4637527756
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 50717
newly activated variable type: nk
newly activated variable out arcs:
                                    [59, 86]
finding: [1, 0, 0, 0]
[59]
arc: 59
variable:
variable:
activated variable: 50717
activated variable: 15360
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                    [164, 165]
finding: [1, 0, 0, 0]
count of activated variables: 0
newly activated variable id: 50717
newly activated variable type: nk
newly activated variable out arcs:
finding:
         [1, 0, 0, 0]
[59]
arc:
     59
variable: 32
variable: 76
activated variable: 50717
activated variable: 15360
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                    [164, 165]
finding: [1, 0, 0, 0]
Г٦
count of activated variables: 0
newly activated variable id: 50717
newly activated variable type: nk
newly activated variable out arcs:
                                    [59, 86]
finding: [1, 0, 0, 0]
[59]
arc: 59
variable: 32
```

```
variable: 76
activated variable: 50717
activated variable: 15360
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                   [164, 165]
finding: [1, 0, 0, 0]
П
count of activated variables: 0
newly activated variable id: 50717
newly activated variable type: nk
newly activated variable out arcs:
                                    [59, 86]
          [1, 1, 1, 1]
finding:
[59, 86]
arc: 59
variable:
variable:
          76
arc: 86
variable:
         32
variable: 99
activated variable: 50717
activated variable:
                    15360
activated variable: 50717
activated variable: 71091
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                    [164, 165]
finding:
          [1, 1, 1, 1]
[164, 165]
arc: 164
variable:
variable:
          164
arc: 165
variable: 76
variable: 165
activated variable: 15360
activated variable: 15361
activated variable: 15360
activated variable: 72398
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                   [164, 165]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 15361
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
```

```
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                   [164, 165]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 72398
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 71091
newly activated variable type: ar
newly activated variable out arcs:
                                   [412, 413, 414, 415, 416, 417, 418]
finding: [1, 1, 1, 1]
[412, 413, 414, 415, 416, 417, 418]
arc: 412
variable:
variable:
          329
arc: 413
variable:
          99
variable:
          330
arc: 414
variable:
          99
variable:
           331
arc: 415
variable:
          99
variable:
          332
arc: 416
variable:
          99
variable:
          333
arc: 417
variable: 99
variable:
          334
arc: 418
variable: 99
variable: 335
activated variable: 71091
activated variable: 4715293736
activated variable: 71091
activated variable: 4720339150
activated variable: 71091
activated variable: 4720340413
activated variable: 71091
```

```
activated variable: 4715303173
activated variable: 71091
activated variable: 4720340414
activated variable: 71091
activated variable: 4715306063
activated variable: 71091
activated variable: 4715306064
newly activated variable id: 71091
newly activated variable type: ar
newly activated variable out arcs:
                                   [412, 413, 414, 415, 416, 417, 418]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4715293736
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 71091
newly activated variable type: ar
                                   [412, 413, 414, 415, 416, 417, 418]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4720339150
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 71091
newly activated variable type: ar
newly activated variable out arcs: [412, 413, 414, 415, 416, 417, 418]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 4720340413
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 71091
newly activated variable type: ar
newly activated variable out arcs:
                                   [412, 413, 414, 415, 416, 417, 418]
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 4715303173
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 71091
newly activated variable type: ar
newly activated variable out arcs:
                                   [412, 413, 414, 415, 416, 417, 418]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4720340414
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 71091
newly activated variable type: ar
newly activated variable out arcs:
                                   [412, 413, 414, 415, 416, 417, 418]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715306063
newly activated variable type: feature
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 71091
newly activated variable type: ar
newly activated variable out arcs: [412, 413, 414, 415, 416, 417, 418]
finding: [1, 1, 1, 1]
П
count of activated variables: 0
newly activated variable id: 4715306064
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 50717
newly activated variable type: nk
newly activated variable out arcs:
                                   [59, 86]
finding: [1, 1, 1, 1]
[59, 86]
```

```
arc: 59
variable:
          32
variable:
          76
arc: 86
variable:
          32
variable:
          99
activated variable: 50717
activated variable:
                    15360
activated variable: 50717
activated variable: 71091
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                   [164, 165]
finding:
         [1, 1, 1, 1]
[164, 165]
arc: 164
variable:
          76
variable:
          164
arc: 165
variable:
          76
variable: 165
activated variable: 15360
activated variable: 15361
activated variable: 15360
activated variable: 72398
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs:
                                   [164, 165]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 15361
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Π
count of activated variables: 0
newly activated variable id: 15360
newly activated variable type: sk
newly activated variable out arcs: [164, 165]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 72398
newly activated variable type: sk_minus_one
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
```

```
count of activated variables: 0
newly activated variable id: 71091
newly activated variable type: ar
newly activated variable out arcs:
                                   [412, 413, 414, 415, 416, 417, 418]
finding: [1, 1, 1, 1]
[412, 413, 414, 415, 416, 417, 418]
arc: 412
variable: 99
variable: 329
arc: 413
variable: 99
variable: 330
arc: 414
variable: 99
variable:
          331
arc: 415
variable:
         99
variable: 332
arc: 416
variable: 99
variable: 333
arc: 417
variable: 99
variable: 334
arc: 418
variable: 99
variable: 335
activated variable: 71091
activated variable: 4715293736
activated variable: 71091
activated variable: 4720339150
activated variable: 71091
activated variable: 4720340413
activated variable: 71091
activated variable: 4715303173
activated variable: 71091
activated variable: 4720340414
activated variable: 71091
activated variable: 4715306063
activated variable: 71091
activated variable: 4715306064
newly activated variable id: 71091
newly activated variable type: ar
                                   [412, 413, 414, 415, 416, 417, 418]
newly activated variable out arcs:
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715293736
```

```
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 71091
newly activated variable type: ar
newly activated variable out arcs:
                                    [412, 413, 414, 415, 416, 417, 418]
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 4720339150
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
Г٦
count of activated variables: 0
newly activated variable id: 71091
newly activated variable type: ar
newly activated variable out arcs: [412, 413, 414, 415, 416, 417, 418]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4720340413
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 71091
newly activated variable type: ar
newly activated variable out arcs:
                                   [412, 413, 414, 415, 416, 417, 418]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4715303173
newly activated variable type: feature
newly activated variable out arcs: []
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 71091
newly activated variable type: ar
newly activated variable out arcs:
                                    [412, 413, 414, 415, 416, 417, 418]
finding: [1, 1, 1, 1]
count of activated variables: 0
newly activated variable id: 4720340414
```

```
newly activated variable out arcs: []
    finding: [1, 1, 1, 1]
    Π
    count of activated variables: 0
    newly activated variable id: 71091
    newly activated variable type: ar
    newly activated variable out arcs:
                                        [412, 413, 414, 415, 416, 417, 418]
    finding: [1, 1, 1, 1]
    П
    count of activated variables: 0
    newly activated variable id: 4715306063
    newly activated variable type: feature
    newly activated variable out arcs:
    finding: [1, 1, 1, 1]
    Г٦
    count of activated variables: 0
    newly activated variable id: 71091
    newly activated variable type: ar
    newly activated variable out arcs: [412, 413, 414, 415, 416, 417, 418]
    finding: [1, 1, 1, 1]
    count of activated variables: 0
    newly activated variable id: 4715306064
    newly activated variable type: feature
    newly activated variable out arcs: []
    finding: [1, 1, 1, 1]
    count of activated variables: 0
       Run the next cell to view the output data structure.
[17]: #print result:
     # print(json.dumps(feature_selection['features']))
     # print(json.dumps(feature selection['views']))
     # pretty print
     print(json.dumps(feature_selection['views'], indent=4, sort_keys=True))
     # print(feature_selection['features'][157])
    {
            "scale_1": [
                {
                    "FEATURES": [],
                    "SK": [
                        46.
                        47,
                        48,
```

newly activated variable type: feature

```
49,
             50,
             51,
             52,
             53,
             54,
             55,
             56,
             57,
             60,
             59,
             61,
             65,
             66,
             67,
             45,
             70,
             69,
             71,
             72,
             73,
             74,
             75,
             76
        ],
        "SK_MINUS_ONE": [
             157,
             161,
             162
        ],
        "SK_PLUS_ONE": [
             104,
             105,
             106,
             107,
             108,
             109,
             110,
             111,
             112,
             113,
             102
        ]
    },
    {},
    {},
    {}
]
```

```
},
{
    "scale_2": [
         {
             "FEATURES": [],
             "SK": [
                  46,
                 47,
                  48,
                  49,
                  50,
                  51,
                  52,
                 53,
                  54,
                  55,
                  56,
                  57,
                  60,
                  59,
                 61,
                  65,
                  66,
                  67,
                  45,
                  70,
                 69,
                 71,
                 72,
                 73,
                 74,
                  75,
                  76
             ],
             "SK_MINUS_ONE": [
                 157,
                 161,
                 162
             ],
             "SK_PLUS_ONE": [
                 104,
                  105,
                 106,
                  107,
                 108,
                  109,
                  110,
                  111,
```

```
112,
                 113,
                 102
             ]
        },
        {},
        {},
        {}
    ]
},
{
    "scale_3": [
        {
             "FEATURES": [],
             "SK": [
                 46,
                 47,
                 48,
                 49,
                 50,
                 51,
                 52,
                 53,
                 54,
                 55,
                 56,
                 57,
                 60,
                 59,
                 61,
                 65,
                 66,
                 67,
                 45,
                 70,
                 69,
                 71,
                 72,
                 73,
                 74,
                 75,
                 76
             "SK_MINUS_ONE": [
                 157,
                 161,
                 162
             ],
```

```
"SK_PLUS_ONE": [
                  104,
                  105,
                  106,
                  107,
                  108,
                  109,
                  110,
                  111,
                  112,
                  113,
                  102
             ]
        },
         {},
         {},
         {}
    ]
},
{
    "scale_4": [
         {
             "FEATURES": [
                  171,
                  172,
                  173,
                  174,
                 175,
                  176,
                  177,
                  178,
                  179,
                  191,
                  190,
                  189,
                  185,
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303,
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    330,
    331,
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    333,
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],
"SK": [
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    67,
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    69,
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    72,
    73,
    74,
    75,
    76
],
"SK_MINUS_ONE": [
    116,
    117,
    118,
    119,
    120,
    121,
    122,
    124,
    125,
    123,
    126,
    127,
    128,
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    114,
    115,
    154,
    153,
    157,
```

```
155,
                  156,
                  158,
                  161,
                  162,
                  159,
                  160,
                  163,
                  164,
                  165
             ],
             "SK_PLUS_ONE": [
                  104,
                  105,
                  106,
                  107,
                  108,
                  109,
                  110,
                  111,
                  112,
                  113,
                  102
             ]
         },
         {},
         {},
         {}
    ]
},
{
    "scale_5": [
        {
             "FEATURES": [
                  166,
                  167,
                  168,
                  169,
                  170,
                  171,
                  172,
                  173,
                  174,
                  175,
                  176,
                  177,
                  178,
                  179,
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320,
     321,
     322,
     323,
     340,
    324,
     325,
     326,
     327,
     328,
     329,
    330,
    331,
    332,
    333,
     334,
     335
],
"SK": [
    46,
     47,
     48,
     49,
     50,
     51,
     52,
    53,
     54,
    55,
     56,
    57,
     60,
     59,
     61,
     65,
    66,
    67,
     45,
     70,
     69,
     71,
     72,
    73,
    74,
    75,
    76
],
"SK_MINUS_ONE": [
```

```
116,
    117,
    118,
    119,
    120,
    121,
    122,
    123,
    124,
    125,
    126,
    127,
    128,
    129,
    130,
    131,
    132,
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    146,
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    152,
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    157,
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    156,
    158,
    161,
    162,
    159,
    160,
    163,
    164,
    165
],
"SK_PLUS_ONE": [
    104,
    105,
```

```
106,
                         107,
                         108,
                         109,
                         110,
                         111,
                         112,
                         113,
                         102
                    ]
               },
               {},
               {},
               {}
          ]
     }
]
```

In the final figure below we see the result visualised in a simplified, cube-shaped representation of view space, i.e. a movement 'down' from $scale_1$ represents a zoom interaction, and a movement on any plane across the view space represents a pan. As point features are shown only, the SK / SK_PLUS_ONE/ SK_MINUS_ONE activated variables are not illustrated, however the NK variables are shown to give some sense of the underlying structure of the selection as they too follow the path of the journey, and conceptually, persist across all scales through the view space.

As discussed in the opening comments, a context-specific map view can now be automatically generated, and is equivalent to a square subset of the view space. We have created a probability distribution via message propagation that has determined both the presence and persistence of features through the view space, represented in the figure below as linear vectors, with an example of each type labelled.

Figure 5: feature selection result visualised in a simplified three-dimensional representation of view space

```
[19]: %%html <img src="img/fig_5.png", width=1000, height=200>
```

<IPython.core.display.HTML object>