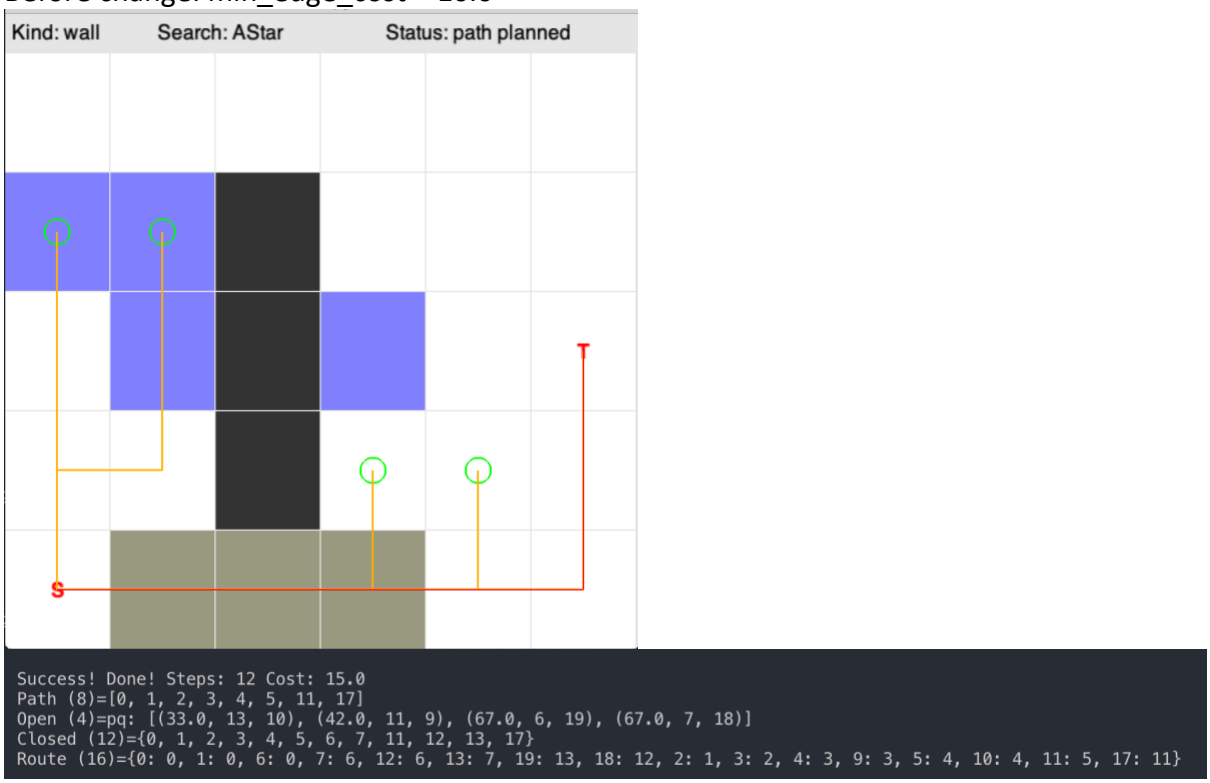
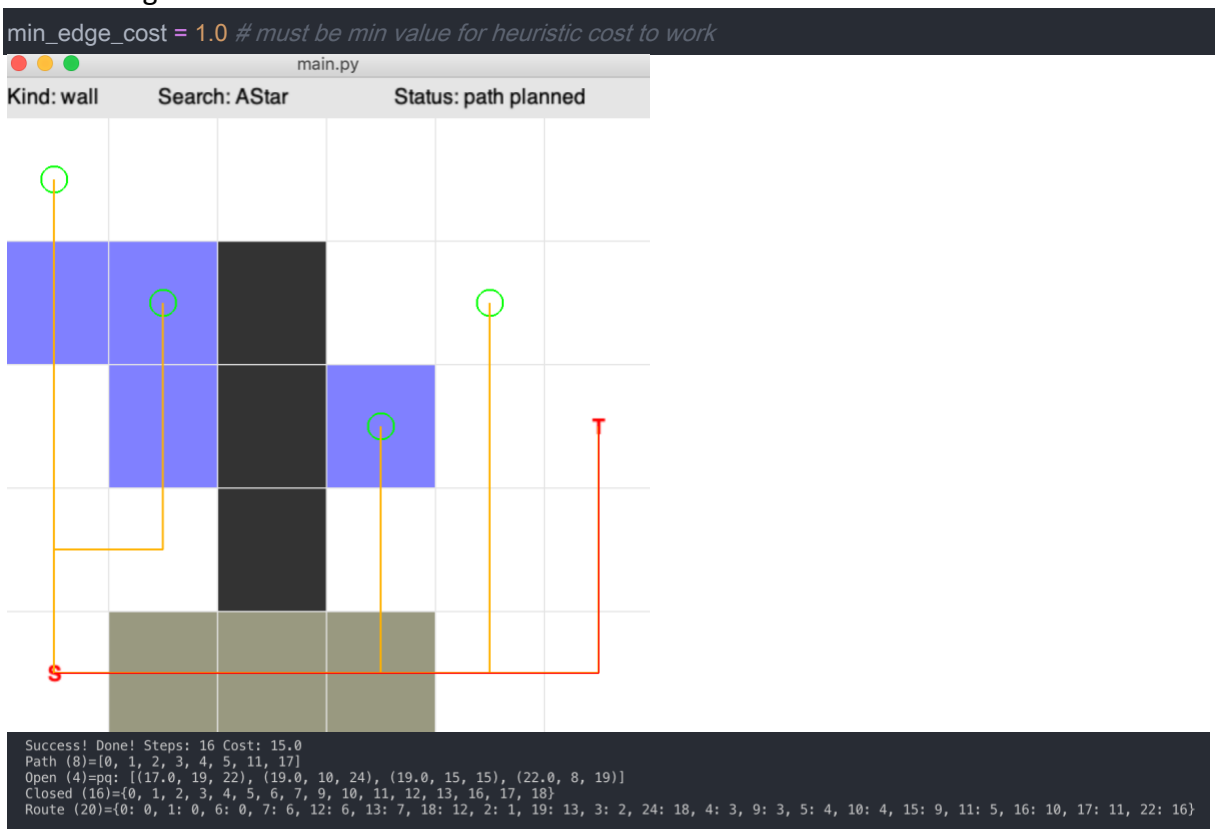
Before change: min_edge_cost = 10.0



After change:



By changing the value to the min value, more routes are discovered. This means that the path finding algorith is more optimal to find more available solutions.

```
def reset_navgraph(self):
        self.path = None # invalid so remove if present
        self.graph = SparseGraph()
        # Set a heuristic cost function for the search to use
        self.graph.cost_h = self._manhattan
        self.graph.cost_h = self._hypot
        self.graph.cost_h = self._max

        nx, ny = self.nx, self.ny
        # add all the nodes required
        for i, box in enumerate(self.boxes):
            box.pos = (i % nx, i // nx) #tuple position
            box.node = self.graph.add_node(Node(idx=i))
        # build all the edges required for this world
        for i, box in enumerate(self.boxes):
            # four sided N-S-E-W connections
            if box.kind in no_edge:
                continue
            # UP (i + nx)
            if (i+nx) < len(self.boxes):
                self._add_edge(i, i+nx)
            # DOWN (i - nx)
            if (i-nx) >= 0:
                self._add_edge(i, i-nx)
            # RIGHT (i + 1)
            if (i%nx + 1) < nx:
                self._add_edge(i, i+1)
            # LEFT (i - 1)
            if (i%nx - 1) >= 0:
                self._add_edge(i, i-1)
#           # Diagonal connections
            # UP LEFT(i + nx - 1)
            j = i + nx
            if (j-1) < len(self.boxes) and (j%nx - 1) >= 0:
                self._add_edge(i, j-1, 1.4142) # sqrt(1+1)
            # UP RIGHT (i + nx + 1)
            j = i + nx
            if (j+1) < len(self.boxes) and (j%nx + 1) < nx:
                self._add_edge(i, j+1, 1.4142)
```

```
        # DOWN LEFT(i - nx - 1)
        j = i - nx
        if (j-1) >= 0 and (j%nx - 1) >= 0:
            print( i, j, j%nx)
            self._add_edge(i, j-1, 1.4142)
        # DOWN RIGHT (i - nx + 1)
        j = i - nx
        if (j+1) >= 0 and (j%nx +1) < nx:
             self._add_edge(i, j+1, 1.4142)
```

Code needed to add diagonal edges is uncommented and fixed.
The use of Manhattan distance calculation is altered.