# Example solutions for two different goal and obstacle configurations are given below

Original:

Agent starting position [4, 1]

Goal Position [2, 4]

Obstacles [3, 1][3, 2][4, 3]

Optimal Utility Found

0.34 0.48 0.67 0.8 0.61

0.27 0.44 0.78 1 0.8

-1 -1 0.46 0.78 0.67

-0 -0.11 -1 0.46 0.48

0.02 0.04 0.08 0.35 0.35

Optimal Policy Found

Right Right Down Down Down

Up Up Right 1.0 Left

-1.0 -1.0 Right Up Left

Down Down -1.0 Right Up

Right Right Right Up Up

First:

Agent starting position [4, 1]

Goal Position [1, 3]

Obstacles [3, 1][3, 2][1, 2]

Optimal Utility Found

-0.15 -1 1 0.72 0.52

-0.03 0.2 0.74 0.64 0.53

-1 -1 0.49 0.53 0.45

0.14 0.22 0.39 0.44 0.37

0.17 0.24 0.33 0.36 0.28

Optimal Policy Found

Down -1.0 1.0 Left Left

Right Right Up Left Left

-1.0 -1.0 Right Up Left

Down Down Up Up Left

Right Right Up Up Up

Second: Agent starting position [4, 1]

Goal Position [3, 3]

Obstacles [3, 4][3, 2][4, 3]

Optimal Utility Found

0.31 0.42 0.58 0.42 0.31

0.3 0.41 0.74 0.41 0.3

0.06 -1 1 -1 0.06

0.02 -0.12 -1 -0.12 0.02

0.01 -0.01 -0.14 -0.01 0.01

Optimal Policy Found

Right Right Down Left Left

Right Up Down Up Left

Up -1.0 1.0 -1.0 Up

Up Left -1.0 Right Up

Up Left Right Right Up