## Qadvanced10:

/Users/james/anaconda3/envs/COSC480/bin/python /Users/james/ PycharmProjects/Vision\_Test/qNavigation.py

- [1, 1, 1, 0, 1, 0, 1, 1, 1, 1, 0, 1, 1, 1, 4]
- [[0. 0. 0. 0.]
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- [0. 0. 0. 0.]
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- [0. 0. 0. 0.]
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$
- $[0. \ 0. \ 0. \ 0.]$

- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- $[0. \ 0. \ 0. \ 0.]$
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [0. 0. 0. 0.]
- [1. 1. 1. 1.]
- [1. 1. 1. 1.]
- [1. 1. 1. 1.]
- [1. 1. 1. 1.]]

Fail

Moves: 1

Iteration: 2

Fail

Moves: 2

Iteration: 3

Fail

Moves: 5

Iteration: 4

Fail

Moves: 7

Iteration: 5

Fail

Moves: 5

Iteration: 6

Fail

Moves: 1

Iteration: 7

Fail

Moves: 9 Iteration: 8

Fail

Moves: 7 Iteration: 9

Fail

Moves: 2 Iteration: 10

Fail

Moves: 19 Successses: 0 Iteration: 11

Fail

Moves: 1 Iteration: 12

Fail

Moves: 6 Iteration: 13

Fail

Moves: 8 Iteration: 14

Fail

Moves: 15 Iteration: 15

Fail

Moves: 6 Iteration: 16

Fail

Moves: 2 Iteration: 17

Fail

Moves: 13 Iteration: 18

Fail

Moves: 8 Iteration: 19 Moves: 16 Iteration: 20

Fail

Moves: 7

Successses: 1 Iteration: 21

Fail

Moves: 1

Iteration: 22

Fail

Moves: 5 Iteration: 23

Fail

Moves: 2 Iteration: 24

Fail

Moves: 5 Iteration: 25

Fail

Moves: 5 Iteration: 26

Fail

Moves: 6 Iteration: 27

Fail

Moves: 6 Iteration: 28

Fail

Moves: 5 Iteration: 29

Fail

Moves: 3 Iteration: 30

Fail

Moves: 9

Successses: 0 Iteration: 31

Fail

Moves: 2 Iteration: 32 Moves: 6 Iteration: 33

Fail

Moves: 13 Iteration: 34

Fail

Moves: 8 Iteration: 35

Fail

Fail

Moves: 12 Iteration: 37

Fail

Moves: 7 Iteration: 38

Fail

Moves: 9 Iteration: 39

Fail

Moves: 12 Iteration: 40

Fail

Moves: 2

Successes: 1 Iteration: 41 Moves: 8 Iteration: 42

Fail

Moves: 1 Iteration: 43

Fail

Moves: 17 Iteration: 44

Fail

Moves: 6 Iteration: 45

Fail

Moves: 5 Iteration: 46

Fail

Moves: 12 Iteration: 47

Fail

Moves: 14 Iteration: 48

Fail

Moves: 17 Iteration: 49

Fail

Moves: 10 Iteration: 50

Moves: 2

Successses: 1 Iteration: 51

Fail

Moves: 7 Iteration: 52

Fail

Moves: 4 Iteration: 53

Fail

Moves: 4 Iteration: 54

Fail

Moves: 9 Iteration: 55

Fail

Moves: 3 Iteration: 56

Fail

Moves: 3 Iteration: 57

Fail

Moves: 5 Iteration: 58

Fail

Moves: 4 Iteration: 59 Moves: 6 Iteration: 60

Fail

Moves: 3

Successses: 1 Iteration: 61

Fail

Moves: 6 Iteration: 62

Fail

Moves: 6 Iteration: 63

Fail

Moves: 5 Iteration: 64

Moves: 7 Iteration: 65 Moves: 10 Iteration: 66

Fail

Moves: 30 Iteration: 67

Fail

Moves: 11 Iteration: 68 Moves: 7 Iteration: 69

Fail

Moves: 7 Iteration: 70

Fail

Moves: 1

Successses: 2 Iteration: 71

Fail

Moves: 23 Iteration: 72

Fail

Moves: 4 Iteration: 73

Fail

Moves: 1 Iteration: 74 Moves: 19 Iteration: 75

Fail

Moves: 26 Iteration: 76

Fail

Moves: 7 Iteration: 77

Fail

Moves: 22 Iteration: 78

Fail

Moves: 6 Iteration: 79

Moves: 12 Iteration: 80

Fail

Moves: 10 Successses: 1 Iteration: 81 Moves: 11 Iteration: 82 Moves: 8 Iteration: 83 Moves: 10

Fail

Moves: 11 Iteration: 85 Moves: 10 Iteration: 86

Iteration: 84

Fail

Moves: 3 Iteration: 87

Fail

Moves: 3 Iteration: 88

Fail

Moves: 11 Iteration: 89 Moves: 9 Iteration: 90

Fail

Moves: 2

Successses: 5 Iteration: 91 Moves: 14 Iteration: 92

Fail

Moves: 6 Iteration: 93

Fail

Moves: 4 Iteration: 94

Fail

Fail

Moves: 1 Iteration: 96

Fail

Moves: 4 Iteration: 97

Fail

Moves: 7 Iteration: 98 Moves: 24 Iteration: 99

Fail

Moves: 3 Iteration: 100

Fail

Moves: 12 Successses: 2 Iteration: 101

Fail

Moves: 1

Iteration: 102

Fail

Moves: 5 Iteration: 103

Fail

Moves: 4 Iteration: 104

Fail

Moves: 5

Iteration: 105

Moves: 9

Iteration: 106

Moves: 8

Iteration: 107 Moves: 17

Iteration: 108

Moves: 7

Iteration: 109

Fail

Moves: 6 Iteration: 110 Moves: 13 Successses: 5 Iteration: 111 Moves: 9 Iteration: 112 Moves: 10 Iteration: 113

Fail

Moves: 5 Iteration: 114

Fail

Moves: 7 Iteration: 115

Fail

Moves: 3 Iteration: 116

Fail

Moves: 6 Iteration: 117

Fail

Moves: 5 Iteration: 118 Moves: 18 Iteration: 119 Moves: 9 Iteration: 120 Moves: 7

Successses: 5 Iteration: 121

Fail

Moves: 4 Iteration: 122 Moves: 9 Iteration: 123

Moves: 6

Iteration: 124

Fail

Moves: 2 Iteration: 125

Fail

Moves: 2 Iteration: 126

Fail

Fail

Moves: 6

Iteration: 128

Moves: 7

Iteration: 129

Moves: 6

Iteration: 130

Moves: 6

Successses: 5 Iteration: 131

Fail

Moves: 5

Iteration: 132

Fail

Moves: 1

Iteration: 133

Fail

Moves: 7

Iteration: 134

Fail

Moves: 6

Iteration: 135

Moves: 6

Iteration: 136

Moves: 11

Iteration: 137

Moves: 18

Iteration: 138

Moves: 7

Iteration: 139

Moves: 6

Iteration: 140

Moves: 12

Successses: 6

Iteration: 141

Fail

Moves: 7

Iteration: 142

Moves: 8

Iteration: 143

Moves: 13

Iteration: 144

Moves: 2

Iteration: 145

Moves: 7

Iteration: 146

Moves: 7

Iteration: 147

Fail

Moves: 2

Iteration: 148

Moves: 6

Iteration: 149

Moves: 6

Iteration: 150

Moves: 8

Successses: 7 Iteration: 151

Moves: 8

Iteration: 152

Fail

Moves: 1

Iteration: 153

Moves: 10

Iteration: 154

Moves: 6

Iteration: 155

Moves: 11

Iteration: 156

Moves: 8

Iteration: 157

Fail

Moves: 1

Iteration: 158

Moves: 6

Iteration: 159

Moves: 6

Iteration: 160

Moves: 7

Successses: 8 Iteration: 161

Moves: 6

Iteration: 162

Moves: 7

Iteration: 164

Moves: 7

Iteration: 165

Moves: 7

Iteration: 166

Moves: 6

Iteration: 167

Moves: 6

Iteration: 168

Moves: 6

Iteration: 169

Moves: 6

Iteration: 170

Moves: 6

Successses: 10

Iteration: 171

Moves: 6

Iteration: 172

Moves: 6

Iteration: 173

Moves: 6

Iteration: 174

Fail

Moves: 1

Iteration: 175

Moves: 6

Iteration: 176

Moves: 6

Iteration: 177

Moves: 6

Iteration: 178

Moves: 6

Iteration: 179

Moves: 6

Iteration: 180

Moves: 6

Successses: 9 Iteration: 181

Moves: 6

Iteration: 182

Moves: 6

Iteration: 184

Moves: 6

Iteration: 185

Moves: 6

Iteration: 186

Moves: 6

Iteration: 187

Moves: 6

Iteration: 188

Moves: 6

Iteration: 189

Moves: 6

Iteration: 190

Moves: 6

Successses: 10

Iteration: 191

Moves: 6

Iteration: 192

Moves: 6

Iteration: 193

Moves: 6

Iteration: 194

Moves: 6

Iteration: 195

Moves: 6

Iteration: 196

Moves: 6

Iteration: 197

Moves: 6

Iteration: 198

Moves: 6

Iteration: 199

Moves: 6

Iteration: 200

Moves: 6

Successses: 10 Total moves: 1431

[[-4.37992125e-01 3.56579944e-01 -1.88962731e-01 -2.61216323e-01]

 $[\ 0.00000000e+00\ 0.00000000e+00\ 0.00000000e+00\ 0.00000000e+00]$ 

[-4.37992125e-01 -1.55137247e-01 -4.09717847e-01 -3.31351143e-01]

[-5.23691698e-01 -2.76089399e-01 -3.64450483e-01 -4.73001705e-01]

```
[ 0.0000000e+00 0.0000000e+00 0.0000000e+00 0.0000000e+00]
[7.36310924e-01 -2.18208463e-01 -2.14837990e-01 -2.64966626e-01]
[-1.34303681e-01 -2.43182644e-01 -4.07489034e-01 -3.61864456e-01]
[-7.25203781e-02 -3.03491431e-01 -1.71638850e-01 -2.23720284e-01]
[0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00]
[-4.13675921e-01 -3.55927069e-01 -2.00199638e-01 -2.42122938e-01]
[-3.32775531e-01 -2.46130131e-01 -1.96211822e-01 -1.67319771e-01]
[0.00000000e+00 0.00000000e+00 0.0000000e+00 0.00000000e+00]
[ 1.16418523e+00 -3.32775531e-01 -2.70728356e-01 -3.88079917e-01]
[0.00000000e+00 0.00000000e+00 0.0000000e+00 0.0000000e+00]
[-1.24031781e-01 -2.03597156e-01 -8.94241068e-02 -1.28362500e-01]
[0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00]
[0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00]
[0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00]
[0.00000000e+00 0.00000000e+00 0.0000000e+00 0.00000000e+00]
[0.00000000e+00 0.00000000e+00 0.0000000e+00 0.00000000e+00]
[0.00000000e+00 0.00000000e+00 0.0000000e+00 0.00000000e+00]
[0.00000000e+00 0.00000000e+00 0.0000000e+00 0.00000000e+00]
[ 0.0000000e+00 0.0000000e+00 -4.50000000e-02 -2.50000000e-02]
[-1.37531827e-02 -2.86510408e-02 -1.66944375e-01 -1.14718186e-01]
[-2.38417298e-01 1.55453413e+00 -9.43150777e-02 -2.43392396e-02]
[ 0.00000000e+00 2.42763974e-02 -4.89771923e-03 -2.50000000e-02]
[ 0.0000000e+00 0.0000000e+00 0.0000000e+00 0.0000000e+00]
[-4.50000000e-02 -6.00824835e-02 -8.93521923e-03 -2.19500000e-03]
[0.00000000e+00 0.00000000e+00 0.0000000e+00 0.0000000e+00]
[ 1.83177396e+00 -6.19854407e-02 -1.28362500e-01 -1.21762582e-02]
[-2.50000000e-02 0.00000000e+00 0.00000000e+00 0.00000000e+00]
[0.00000000e+00 0.00000000e+00 0.0000000e+00 0.00000000e+00]
[-3.90000000e-03 -8.77500000e-02 -3.90000000e-03 -3.90000000e-03]
[0.00000000e+00 0.00000000e+00 0.0000000e+00 0.00000000e+00]
[0.00000000e+00 0.00000000e+00 0.0000000e+00 0.00000000e+00]
[0.00000000e+00 -8.77500000e-02 0.00000000e+00 0.00000000e+00]
[0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00]
[0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00]
[0.00000000e+00 0.00000000e+00 0.00000000e+00 0.00000000e+00]
[0.00000000e+00 0.00000000e+00 0.0000000e+00 0.0000000e+00]
[1.97693340e+00 -2.00000000e-03 0.00000000e+00 0.00000000e+00]
[0.00000000e+00 -2.50000000e-02 -2.00000000e-03 0.00000000e+00]
[ 0.0000000e+00 0.0000000e+00 0.0000000e+00 0.0000000e+00]
```

```
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00] 
[-7.13125000e-02  1.10000000e+03  0.00000000e+00  0.00000000e+00] 
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00] 
[ 0.00000000e+00  1.95000000e+01  0.00000000e+00  0.00000000e+00] 
[ 0.00000000e+00  0.00000000e+00  0.00000000e+00  0.00000000e+00] 
[ 0.00000000e+00  1.00000000e+00  1.00000000e+00  1.00000000e+00] 
[ 1.00000000e+00  1.00000000e+00  1.00000000e+00  1.00000000e+00]
```

Process finished with exit code 0