

Quiz 8

COMP9021 Principles of Programming

2017 session 1

Sample outputs

```
$ python3 quiz_8.py
```

```
Enter an integer: 0
```

```
Here is the grid that has been generated:
```

```
NW NW NE SW NW NW SW
NW SW SE SE SW SE NE
SW SE SW NE NE SW NW
NE SW NW SW SE NW NW
SW NE NE NE NW NE NW
SW SE SW NE SE SE SE
SE NW NE NE SW NW NE
```

```
There is no path to (0, 0)
```

```
The preferred path to (6, 0) is:
```

```
[(3, 3), (3, 4), (4, 3), (5, 4), (6, 3), (6, 2), (6, 1), (6, 0)]
```

```
There is no path to (6, 6)
```

```
The preferred path to (0, 6) is:
```

```
[(3, 3), (2, 3), (1, 3), (0, 4), (0, 5), (0, 6)]
```

```
$ python3 quiz_8.py
```

```
Enter an integer: 1
```

```
Here is the grid that has been generated:
```

```
SE NE SW NE NW NW NW
NW SE NE NW NE NW NW
NE NW SW SE NE SW NE
NE NE NE NW SE NW NE
SE NW NW SE SW SE SE
NW SW NE NW NE SE SW
NE SW NW SE SW SW NW
```

```
The preferred path to (0, 0) is:
```

```
[(3, 3), (2, 2), (1, 2), (0, 1), (0, 0)]
```

```
There is no path to (6, 0)
```

```
The preferred path to (6, 6) is:
```

```
[(3, 3), (3, 2), (4, 3), (5, 4), (6, 5), (6, 6)]
```

```
The preferred path to (0, 6) is:
```

```
[(3, 3), (3, 2), (4, 3), (4, 4), (3, 5), (2, 4), (1, 4), (0, 4), (1, 5), (0, 6)]
```

```

$ python3 quiz_8.py
Enter an integer: 2
Here is the grid that has been generated:
    NE NE NE SW SE SW SW
    SE NE SE NW NW SW NW
    SW NE NE SW NW SW NW
    NW SE SE SE SE NE SE
    SW SE SE SW SE NW NW
    SW SW SW NW SE NW NW
    SE NW SW NW SW NW NW

There is no path to (0, 0)
The preferred path to (6, 0) is:
    [(3, 3), (4, 3), (5, 3), (6, 2), (6, 1), (6, 0)]
There is no path to (6, 6)
The preferred path to (0, 6) is:
    [(3, 3), (3, 4), (2, 5), (1, 6), (0, 6)]
$ python3 quiz_8.py
Enter an integer: 3
Here is the grid that has been generated:
    SE SE SW NW NE NE NW
    SW SE SE NW NW NW SE
    SE SE NW NE NE SE NE
    SW NE SW NW NW NW NW
    NW SE SW NE NE SE NW
    SE SW NW SW NW NW SW
    NW SE SW NE SW SE SW

There is no path to (0, 0)
The preferred path to (6, 0) is:
    [(3, 3), (3, 2), (4, 1), (4, 0), (5, 0), (6, 0)]
There is no path to (6, 6)
The preferred path to (0, 6) is:
    [(3, 3), (2, 3), (1, 4), (1, 5), (0, 6)]

```

```

$ python3 quiz_8.py
Enter an integer: 4
Here is the grid that has been generated:
    SE SW NE NW NW SE NE
    NE NE NW SW NE SE SW
    SW SE NE SW SE NE SW
    SW SE SE SW SW SW NE
    SW NW SE SE SE NW SW
    NE SW NE SW SW SE NW
    NW SW NW NW SE SE SW

There is no path to (0, 0)
There is no path to (6, 0)
The preferred path to (6, 6) is:
    [(3, 3), (3, 4), (4, 4), (5, 5), (6, 6)]
The preferred path to (0, 6) is:
    [(3, 3), (2, 4), (3, 5), (2, 6), (1, 5), (0, 6)]

```

```

$ python3 quiz_8.py
Enter an integer: 5
Here is the grid that has been generated:
    SW SW NE NW SE NE SE
    NE SW NW SE NW NE SE
    NE SE NW SW SE NW SE
    NE SE NW SE SE NE NE
    SE SE SE SE SW SW SE
    SE SE SE NW SW NE SW
    NW SE SE SW NE SW SW

The preferred path to (0, 0) is:
    [(3, 3), (4, 3), (5, 3), (5, 2), (4, 1), (3, 1), (3, 2), (2, 2), (1, 1), (0, 1), (0, 0)]
The preferred path to (6, 0) is:
    [(3, 3), (4, 3), (5, 3), (5, 2), (5, 1), (6, 0)]
The preferred path to (6, 6) is:
    [(3, 3), (4, 3), (5, 4), (5, 5), (6, 5), (6, 6)]
There is no path to (0, 6)

```