

QUIZ 9

COMP9021 PRINCIPLES OF PROGRAMMING

```
$ python3 quiz_9.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_9.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_9.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_9.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_9.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_9.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)
```