Quiz 8

COMP9021 Principles of Programming

2016 session 2

Sample outputs

We print out a list (we pass a list as argument to print()). So this list is printed out on one line.

There is no path from the top left corner

\$ python3 quiz_8.py

Enter one integer: 7

Here is the grid that has been generated:

1	0	1	0	0	0	1	0	0	0	
0	1	1	0	0	0	1	0	0	0	
0	1	0	0	0	0	1	1	0	0	
1	0	0	0	1	0	0	0	0	1	
1	1	1	1	1	1	0	0	0	0	
1	1	1	1	1	0	0	1	0	1	
0	1	1	0	0	1	1	1	1	1	
0	0	1	1	0	0	1	1	1	1	
1	0	1	1	0	0	1	0	0	1	
Ω	0	1	1	1	0	0	1	1	1	

The leftmost longest path from the top left corner is [(0, 0)]

```
$ python3 quiz_8.py
Enter one integer: 0
```

Here is the grid that has been generated:

```
1
     0
       1
                 1
                    1
          1
            1
               1
0
  1
     0
       0
         1
            0
              1
                 0
                      1
  0
     1
       1
            0
              1
                    1
          1
                 1
     1
       0
  0
         1
            1
               0
                 1
0
  0
     0
       1 0
            0
              1
    1
       0
         1
            1
              0
                 1
1 0
     0
       0 0 1
              1
                0 0 0
0 0 0 1 1
            0 0
                 1
                   1 1
1
 1
    0 1 0 1 1
                 0
1 0
    0 1 0 1 1
                 0
```

The leftmost longest path from the top left corner is [(0, 0), (0, 1), (1, 1)] \$ python3 quiz_8.py

Enter one integer: 9

Here is the grid that has been generated:

```
1
 1
    1
      0 0 0
             1
                1
                  0
                    1
 1
    0
      1
         1
           0
             0
                0
                  0 0
  0 1
      0 1
           0
             0
                1
0
 1
    1 1 0
           0
             0
    0
      0
                0
    0
      0
           0
             1
                0
 0
    0 0 0
           0 0 1 0 1
0 0
   1 0 0 0
             1 0
                  1 0
 1
    0
                1 0 1
      1
         0
           0 1
  0
   0 1 1 1 0
                1 1 0
```

The leftmost longest path from the top left corner is [(0, 0), (0, 1), (0, 2)]

```
$ python3 quiz_8.py
```

Enter one integer: 16

Here is the grid that has been generated:

- 1 1 1 1 1 0 1 0 1 1
- 0 0 0 1 1 1 0 1 0 0
- 1 0 0 0 1 1 1 0 1
- 1 1 0 1 1 1 0 1 0 1
- 0 0 1 0 1 0 1 1 1
- 1 0 0 1 0 1 1 0 1 0
- $1 \quad 0 \quad 1 \quad 0 \quad 0 \quad 0 \quad 1 \quad 1 \quad 0 \quad 0$
- 1 1 1 0 0 1 0 0 0
- $\begin{smallmatrix} 0 & & 1 & & 0 & & 0 & & 1 & & 0 & & 1 & & 0 & & 0 \\ \end{smallmatrix}$
- 0 0 0 0 0 0 1 1 1 0

The leftmost longest path from the top left corner is [(0, 0), (0, 1), (0, 2), (0, 3), (0, 4), (1, 4), (1, 5), (2, 5), (3, 5), (3, 4), (4, 4)]

\$ python3 quiz_8.py

Enter one integer: 17

Here is the grid that has been generated:

- 1 1 1 1 0 1 0 0 0 1
- 1 1 1 1 0 0 0 0 0
- 1 0 0 1 1 0 1 0 1 1
- 0 1 1 0 1 0 1 1 0 1
- 0 0 0 0 1 0 1 0 1 0
- 0 1 1 1 1 0 1 0 1 1
- 0 0 1 0 1 1 1 0 0 1
- 1 0 1 0 0 1 1 1 0 0
- 1 0 0 0 0 1 1 1 0 0
- 1 0 1 1 1 1 0 0 0 0

The leftmost longest path from the top left corner is [(0, 0), (0, 1), (1, 1),

- (1, 2), (0, 2), (0, 3), (1, 3), (2, 3), (2, 4), (3, 4), (4, 4), (5, 4), (6, 4),
- (6, 5), (7, 5), (8, 5), (8, 6), (8, 7), (7, 7), (7, 6), (6, 6), (5, 6), (4, 6),
- (3, 6), (2, 6)]