Quiz 3

COMP9021 Principles of Programming

2017 session 1

Sample outputs

```
$ python3 quiz_3.py
Enter two integers, the second one being strictly positive: 0 1
Here is the grid that has been generated:
     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

There is no parallelogram with horizontal sides.
$ python3 quiz_3.py
Enter two integers, the second one being strictly positive: 0 2
Here is the grid that has been generated:
     1 1 0 1 1 1 1 1 1 0
     0 1 0 0 1 0 1 0 0 1
     1 0 1 1 1 0 1 1 1 0
     0 0 1 0 1 1 0 1 0 0
     0 0 0 1 0 0 1 1 0 1
     1 0 1 0 1 1 0 1 1 0
     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 0 0
     1 0 0 1 0 1 1 0 0 0

The largest parallelogram with horizontal sides has a size of 4.
```

```
$ python3 quiz_3.py
Enter two integers, the second one being strictly positive: 0 3
Here is the grid that has been generated:
     1 1 0 1 1 1 1 1 1 1
     1 0 1 0 1 0 0 1 1 1
     1 1 0 1 0 1 0 1 1 1
     1 0 1 1 1 1 1 0 1 1
     1 1 1 0 1 0 0 1 1 1
     1 1 0 1 1 1 0 1 1 1
     0 0 1 0 0 0 1 1 0 0
     1 1 1 0 1 1 1 1 0 1
     1 1 0 1 1 1 1 1 0 1
     1 1 1 0 1 0 0 0 0 1

The largest parallelogram with horizontal sides has a size of 12.
$ python3 quiz_3.py
Enter two integers, the second one being strictly positive: 0 4
Here is the grid that has been generated:
     1 1 0 1 1 1 1 1 1 1
     1 1 1 0 1 1 1 0 0 1
     1 0 1 1 1 1 1 1 1 0
     0 0 1 0 1 1 1 1 0 1
     1 1 1 1 0 0 1 1 0 1
     1 0 1 1 1 1 0 1 1 1
     1 1 1 1 0 1 1 0 0 1
     1 0 0 1 1 1 1 1 1 1
     1 1 0 1 0 1 1 1 1 0
     1 0 1 1 1 1 1 0 0 1

The largest parallelogram with horizontal sides has a size of 12.
```

```
$ python3 quiz_3_sol.py
Enter two integers, the second one being strictly positive: 1 4
Here is the grid that has been generated:
     1 0 1 0 1 1 1 1 1 0
     1 0 1 1 0 1 1 1 0 1
     0 0 0 0 1 1 1 0 1 1
     1 1 1 1 1 1 1 0 1 0
     1 1 0 1 1 1 1 1 1 1
     0 1 1 1 1 1 1 1 0 1
     0 1 1 1 1 0 1 0 1 1
     1 1 1 0 1 1 1 1 1 1
     1 0 1 1 1 1 0 1 1 1
     1 1 1 1 1 0 1 1 0 1

The largest parallelogram with horizontal sides has a size of 16.
$ python3 quiz_3.py
Enter two integers, the second one being strictly positive: 0 5
Here is the grid that has been generated:
     1 1 0 1 1 1 1 1 1 1
     1 1 1 1 1 1 0 1 1 1
     1 1 1 0 0 1 1 1 0 1
     1 1 1 1 1 1 1 1 1 0
     1 0 0 1 0 1 1 1 1 1
     0 1 1 1 1 1 1 1 0 0
     1 1 1 0 1 1 1 0 1 1
     1 1 1 1 1 1 1 1 0 1 1
     1 1 1 1 1 1 1 1 0 1 1
     1 0 0 1 1 0 0 1 1 1

The largest parallelogram with horizontal sides has a size of 15.
```