

Quiz 5

COMP9021 Principles of Programming

2015 session 2

Sample outputs

```
$ python3 quiz_5.py
Enter 2 integers, the second one being nonnegative: 0 0
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
 0 0 0 0 0 0 0 0 0 0
```

The size of the largest area with a checkers structure is 1

```
$ python3 quiz_5.py
Enter 2 integers, the second one being nonnegative: 0 20
Here is the grid that has been generated:
 1 1 1 1 1 1 1 1 1 1
 1 1 1 1 1 1 1 1 1 1
 1 1 1 1 1 1 1 1 1 1
 1 1 1 1 1 1 1 1 1 1
 1 1 0 1 1 1 0 1 1 1
 1 1 1 1 1 1 1 1 1 1
 1 1 1 1 1 1 1 1 1 1
 1 1 1 1 1 1 1 1 1 1
 1 1 1 1 1 1 1 1 1 1
 1 1 1 1 1 1 1 1 1 1
```

The size of the largest area with a checkers structure is 5

```
$ python3 quiz_5.py
Enter 2 integers, the second one being nonnegative: 0 12
Here is the grid that has been generated:
```

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

The size of the largest area with a checkers structure is 7

```
$ python3 quiz_5.py
Enter 2 integers, the second one being nonnegative: 0 10
Here is the grid that has been generated:
```

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

The size of the largest area with a checkers structure is 9

```
$ python3 quiz_5.py
Enter 2 integers, the second one being nonnegative: 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 1 0 1 0 1 1 1
1 0 1 1 1 1 1 1 1 1
1 1 1 0 1 0 0 1 1 1
1 1 0 1 1 1 1 1 1 1
0 1 1 1 1 1 1 1 0 0
1 1 1 0 1 1 1 1 0 1
1 1 1 1 1 1 1 1 0 1
1 1 1 1 1 1 1 1 0 1
```

The size of the largest area with a checkers structure is 11

```
$ python3 quiz_5.py
Enter 2 integers, the second one being nonnegative: 0 3
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 size of the largest area with a checkers structure is 34