

Quiz 5

COMP9021 Principles of Programming

2016 session 2

Sample outputs

```
$ python3 quiz_5.py
Enter two integers: 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
  0 0 0 0 0 0 0 0 0 0
```

No chess knight has explored this board.

```
$ python3 quiz_5.py
Enter two integers: 0 -20
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 1 0 0 1 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
```

At least 2 chess knights have explored this board.

```
$ python3 quiz_5.py
Enter two integers: 0 -6
Here is the grid that has been generated:
```

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

At least 7 chess knights have explored this board.

```
$ python3 quiz_5.py
Enter two integers: 0 -5
Here is the grid that has been generated:
```

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

At least 8 chess knights have explored this board.

```
$ python3 quiz_5.py
Enter two integers: 0 -4
Here is the grid that has been generated:
```

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

At least 6 chess knights have explored this board.

```
$ python3 quiz_5.py
Enter two integers: 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
```

At least 3 chess knights have explored this board.