Quiz 6

COMP9021 Principles of Programming

2013 session 1

Sample outputs

```
$ a.out 10 0
Here is the grid that has been generated:

     0 1 1 1 1 1 0 1 1 1
     1 0 1 1 0 1 1 1 1 1
     1 1 1 1 1 1 1 1 1 1
     0 1 1 1 1 1 1 1 0 1
     1 0 1 1 1 0 1 1 1 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 0 1 1 1 1

The size of the largest area with a checkers structure is 6
$ a.out 10 1
Here is the grid that has been generated:

     1 1 1 1 0 1 1 1 1 1
     0 1 1 1 1 1 1 1 0 1
     1 1 1 1 0 1 1 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 0 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

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

```
$ a.out 10 2
Here is the grid that has been generated:

     1 1 1 1 1 1 1 1 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 0 1 1 1 1
     1 1 1 1 1 0 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 1 1 1 1 1 1 1 1 1
     1 1 0 1 1 1 1 1 1 1

The size of the largest area with a checkers structure is 8
$ a.out 10 3
Here is the grid that has been generated:

     1 1 1 1 1 1 1 0 1 1
     1 1 1 1 1 1 1 1 1 1
     1 1 0 1 1 1 1 1 1 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 0 1 1 1 1
     1 1 0 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 0
     1 1 1 1 1 1 1 1 1 1

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

```
$ a.out 8 0
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 0 1
     1 1 1 1 1 1 1 1 1 1
     1 1 1 1 1 0 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 0 1 1 0 1
     1 1 0 0 1 1 0 1 1 1
     1 1 1 1 1 1 1 1 1 1
     1 1 1 1 1 1 0 1 1 1

The size of the largest area with a checkers structure is 11
$ a.out 6 4
Here is the grid that has been generated:

     1 1 1 1 1 1 0 0 0 1
     1 0 1 1 0 0 1 1 1 1
     1 1 1 1 1 1 0 1 1 1
     1 1 1 1 0 1 1 1 1 1
     1 1 1 1 0 1 0 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 1 0 1 1
     1 1 0 1 1 0 1 0 1 1
     0 1 1 1 1 1 1 1 1 1

The size of the largest area with a checkers structure is 15
```

```
$ a.out 3 0
Here is the grid that has been generated:

     0 0 1 1 1 0 1 1 1 1
     1 1 1 0 0 1 1 1 0 0
     0 1 1 1 0 1 0 1 0 0
     1 1 1 1 1 1 1 1 1 1
     1 1 1 1 0 1 1 1 1 0
     1 1 1 1 1 1 1 0 1 1
     1 0 1 1 1 1 1 0 1 0
     0 1 0 0 0 1 1 1 1 1
     0 1 0 0 1 0 1 1 1 1
     1 1 1 1 1 0 0 0 1 1

The size of the largest area with a checkers structure is 17
$ a.out 2 1
Here is the grid that has been generated:

     1 1 1 0 0 0 0 0 1 1
     0 1 0 0 1 1 1 1 0 0
     1 1 1 1 0 1 1 0 0 1
     1 0 0 1 0 1 1 1 1 1
     1 0 1 0 1 1 0 1 0 1
     1 1 0 0 0 0 0 0 0 1
     0 0 1 0 1 1 1 0 0 1
     0 1 1 1 1 0 1 0 1 1
     1 0 1 1 1 1 1 0 1 0
     0 1 1 0 0 0 0 1 0 0

The size of the largest area with a checkers structure is 32
```