

## Lab 6 2021 – Sample Output

The following gives you sample output from the program up to the point the game starts. You can continue playing the game against the computer, or you can stop the game there and try the next set, using control-c (or see the lab writeup for more about this and other suggestions).

These examples are not absolutely exhaustive tests of your code, but will give you a good overall test. Different input values will be used in the ECF tests and automarking.

### Example 1

>> Basic test of input and board construction

```
Rows are 1 - 9, Columns are 1 - 11
Orientation is 0 for across, 1 for down
Give starting row, starting column and orientation (3 inputs) for ship of size=5:3 9 1
Give starting row, starting column and orientation (3 inputs) for ship of size=4:3 5 0
Give starting row, starting column and orientation (3 inputs) for ship of size=3:4 2 1
Give starting row, starting column and orientation (3 inputs) for ship of size=2:9 4 0
Give starting row, starting column and orientation (3 inputs) for ship of size=1:9 8 0
Your board is
  Cols
    1  2  3  4  5  6  7  8  9 10 11
R1| 0  0  0  0  0  0  0  0  0  0  0 |
R2| 0  0  0  0  0  0  0  0  0  0  0 |
R3| 0  0  0  0  4  4  4  4  5  0  0 |
R4| 0  3  0  0  0  0  0  0  5  0  0 |
R5| 0  3  0  0  0  0  0  0  5  0  0 |
R6| 0  3  0  0  0  0  0  0  5  0  0 |
R7| 0  0  0  0  0  0  0  0  5  0  0 |
R8| 0  0  0  0  0  0  0  0  0  0  0 |
R9| 0  0  0  2  2  0  0  1  0  0  0 |
Give a shot (row, col):
```

### Example 2

>> Tests invalid inputs for row, column and orientation and tests placement of one ship over another

```
Rows are 1 - 9, Columns are 1 - 11
Orientation is 0 for across, 1 for down
Give starting row, starting column and orientation (3 inputs) for ship of size=5:16 1 1
Invalid Input
Give starting row, starting column and orientation (3 inputs) for ship of size=5:-4 0 1
Invalid Input
Give starting row, starting column and orientation (3 inputs) for ship of size=5:1 1 0
Give starting row, starting column and orientation (3 inputs) for ship of size=4:1 3 1
Conflicts with ship already placed
Give starting row, starting column and orientation (3 inputs) for ship of size=4:6 1 1
Give starting row, starting column and orientation (3 inputs) for ship of size=3:9 -5 0
Invalid Input
Give starting row, starting column and orientation (3 inputs) for ship of size=3:9 12 0
Invalid Input
Give starting row, starting column and orientation (3 inputs) for ship of size=3:9 9 0
Give starting row, starting column and orientation (3 inputs) for ship of size=2:1 11 3
Invalid Input
Give starting row, starting column and orientation (3 inputs) for ship of size=2:1 11 -7
```

Invalid Input

Give starting row, starting column and orientation (3 inputs) for ship of size=2:1 11 0

Invalid Input

Give starting row, starting column and orientation (3 inputs) for ship of size=2:1 11 1

Give starting row, starting column and orientation (3 inputs) for ship of size=1:3 11 1

Your board is

```
  Cols
    1  2  3  4  5  6  7  8  9 10 11
R1| 5  5  5  5  5  0  0  0  0  0  2 |
R2| 0  0  0  0  0  0  0  0  0  0  2 |
R3| 0  0  0  0  0  0  0  0  0  0  1 |
R4| 0  0  0  0  0  0  0  0  0  0  0 |
R5| 0  0  0  0  0  0  0  0  0  0  0 |
R6| 4  0  0  0  0  0  0  0  0  0  0 |
R7| 4  0  0  0  0  0  0  0  0  0  0 |
R8| 4  0  0  0  0  0  0  0  0  0  0 |
R9| 4  0  0  0  0  0  0  0  3  3  3 |
```

Give a shot (row, col):

### Example 3

>> Tests placement of ship over edge of board

Rows are 1 - 9, Columns are 1 - 11

Orientation is 0 for across, 1 for down

Give starting row, starting column and orientation (3 inputs) for ship of size=5:2 8 0

Invalid Input

Give starting row, starting column and orientation (3 inputs) for ship of size=5:6 8 1

Invalid Input

Give starting row, starting column and orientation (3 inputs) for ship of size=5:2 3 0

Give starting row, starting column and orientation (3 inputs) for ship of size=4:5 5 1

Give starting row, starting column and orientation (3 inputs) for ship of size=3:7 8 1

Give starting row, starting column and orientation (3 inputs) for ship of size=2:6 10 0

Give starting row, starting column and orientation (3 inputs) for ship of size=1:9 11 0

Your board is

```
  Cols
    1  2  3  4  5  6  7  8  9 10 11
R1| 0  0  0  0  0  0  0  0  0  0  0 |
R2| 0  0  5  5  5  5  5  0  0  0  0 |
R3| 0  0  0  0  0  0  0  0  0  0  0 |
R4| 0  0  0  0  0  0  0  0  0  0  0 |
R5| 0  0  0  0  4  0  0  0  0  0  0 |
R6| 0  0  0  0  4  0  0  0  0  2  2 |
R7| 0  0  0  0  4  0  0  3  0  0  0 |
R8| 0  0  0  0  4  0  0  3  0  0  0 |
R9| 0  0  0  0  0  0  0  3  0  0  1 |
```

Give a shot (row, col):