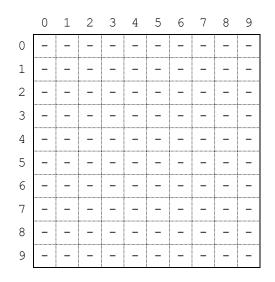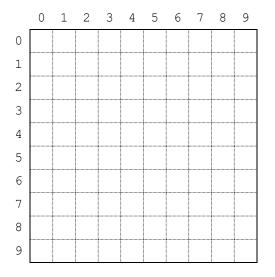# Assignment 8: Battleship Decomposition

In this assignment you will write a Board class for a battleship game program.

You can use these grids to represent the squares array as successive calls to the methods addShip and shoot are made (you can shade squares containing '–' to save time).
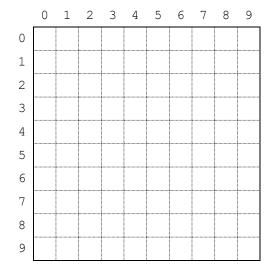
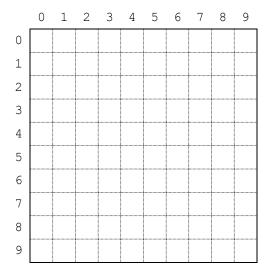1. Value of `squares` after constructor called

	0	1	2	3	4	5	6	7	8	9
0	–	–	–	–	–	–	–	–	–	–
1	–	–	–	–	–	–	–	–	–	–
2	–	–	–	–	–	–	–	–	–	–
3	–	–	–	–	–	–	–	–	–	–
4	–	–	–	–	–	–	–	–	–	–
5	–	–	–	–	–	–	–	–	–	–
6	–	–	–	–	–	–	–	–	–	–
7	–	–	–	–	–	–	–	–	–	–
8	–	–	–	–	–	–	–	–	–	–
9	–	–	–	–	–	–	–	–	–	–

3. After call `addShip(6, 8, 3, false)`

	0	1	2	3	4	5	6	7	8	9
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										

2. After call `addShip(3, 2, 4, true)`

	0	1	2	3	4	5	6	7	8	9
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										

4. After call `addShip( , , , )`

	0	1	2	3	4	5	6	7	8	9
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										

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5. After call `shoot(0, 7)`

```
    0   1   2   3   4   5   6   7   8   9
0
1
2
3
4
5
6
7
8
9
```

7. After call `shoot( , )`

```
    0   1   2   3   4   5   6   7   8   9
0
1
2
3
4
5
6
7
8
9
```

6. After call `shoot(3, 4)`

```
    0   1   2   3   4   5   6   7   8   9
0
1
2
3
4
5
6
7
8
9
```

8. After call `shoot( , )`

```
    0   1   2   3   4   5   6   7   8   9
0
1
2
3
4
5
6
7
8
9
```

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