

Jack O'Connor

## Second Method:

```
public static boolean hasAliveShips(Player player) {
    int aliveShips = 0;

    // loop through all player's ships to see if there are any alive
    for (int i = 0; i < 8; i++) {
        Ship currShip = player.getShipsArr()[i];
        if (!currShip.isDead()) {
            aliveShips++;
        } else {
            // add to sunkenShips array if it's not already in it
            if (!player.getSunkenShips().contains(currShip)) {
                player.getSunkenShips().add(currShip);
            }
            System.out.println();
            // if player's sunkenShips array is full, then they have no alive ships left
            if (player.getSunkenShips().size() == 8) {
                return false;
            }
        }
    }

    // if there are any alive ships return true
    if (aliveShips > 0) {
        return true;
    }

    return false;
}
```

	A	B	C	D	E	F	G	H	I	J
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Player 1's Board

	A	B	C	D	E	F	G	H	I	J
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

Player 2's Board

**\*\* Welcome to BATTLESHIP! \*\***

to make your moves use the format:

<SHIP NAME> <A-J> <1-10> <H/V>

(H = horizontal, V = vertical)

-----

player1 | make your move: submarine i 10 h

player1 | make your move: destroyer a 1 h

player1 | make your move: destroyer j 1 v

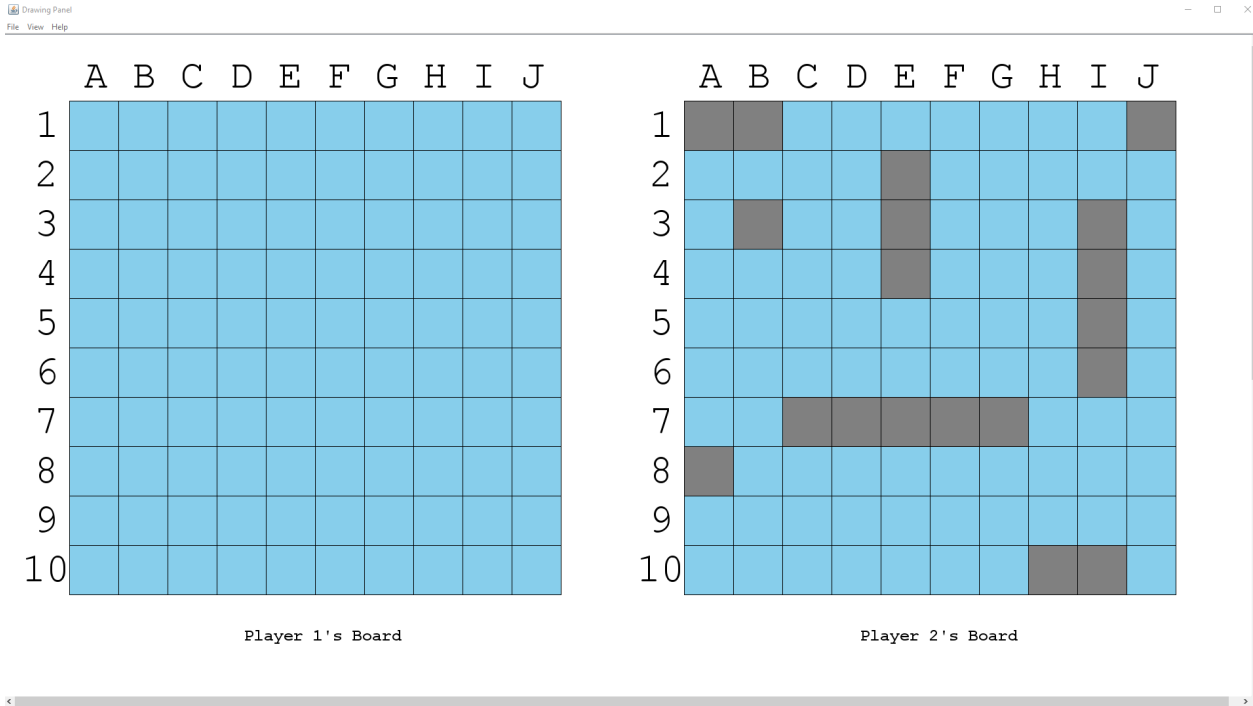
player1 | make your move: cruiser d 3 h

player1 | make your move: battleship b 5 v

player1 | make your move: submarine h 1 h

player1 | make your move: submarine e 1 h

player1 | make your move: carrier e 6 h



```
player2 | make your move: submarine a 8 h  
player2 | make your move: submarine j 1 h  
player2 | make your move: submarine b 3 h  
player2 | make your move: destroyer h 10 h  
player2 | make your move: destroyer a 1 h  
player2 | make your move: cruiser e 2 v  
player2 | make your move: battleship i 3 v  
player2 | make your move: carrier c 7 h
```

Program lets each player choose their ship's positioning and then hides the ships when they players are taking turns placing bombs.

	A	B	C	D	E	F	G	H	I	J
1	●		●							
2								●		
3										
4					●			●		
5								●		
6								●		
7								●		
8								●		
9								●		
10		●								

Player 1's Board

	A	B	C	D	E	F	G	H	I	J
1	●	●								●
2					●					
3					●					
4		●			●					
5										
6					●					
7	●									
8										
9								●		
10	●									

Player 2's Board

```

-----Next Turn-----

| player2's sunken ships: submarine @ (J, 1) | destroyer @ (A, 1) |

player1 | place your bomb: E 3
    player2's ship was HIT!

-----Next Turn-----

| player1's sunken ships: submarine @ (A, 1) |

player2 | place your bomb: H 8
    player1's ship was HIT!

-----Next Turn-----

| player2's sunken ships: submarine @ (J, 1) | destroyer @ (A, 1) |

player1 | place your bomb: E 4
    player2's ship was HIT!

-----Next Turn-----

```

Screen when game is over, in screenshot player 1 won

