

## SAMPLE SOLUTION FOR WEEK 4 LAB

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1 # TODO : 1. There are two players in the game. Initialize their names as
   string
2 player1: str = "Computer"
3 player2: str = "User"
4
5 # TODO : 2. There are two layers in the sea. Initialize the integer
   variable layer
6 layer: int = 2
7
8 # TODO : 3. The battleship board is 10 by 10 dimension. Initialize the
   integer variables # width and height
9 width: int = 10
10 height: int = 10
11
12 # TODO : 4. Initialize a boolean variable that will be used to indicate #
   whether user input is valid or not, two boolean variables hit and
   miss that indicate # whether the ship is hit or missed
13 valid: bool = False
14 hit: bool = False
15 miss: bool = False
16
17 # TODO : 5. The ships have only two orientation, either vertical or
   horizontal.
18 # Initialize a variable as ship orientation
19 ori: str = 'v'
20
21 # TODO : 6. The coordinates of where to put ship or where to hit on the
   board have a # specific format. Create a string variable as
   coordinates
22 coor: str = 'A,4,1'
23
24 # TODO : 7. There are only two types of ships. Initialize two string
   variables as ship names
25 ship1: str = 'submarine'
26 ship2: str = 'carrier'
27
28 # TODO : 8. Initialize a string variable holding a welcome message that
   can be displayed to user
29 welmes: str = "Welcome to Battleships! Hit ENTER to continue..."
30 input(welmes)
31 print(
32     "Please enter coordinate of the attack center point in following this
       format (row,col,depth). E.g. A,4,1\n"
33     "Note: depth = 0 represents the subsea layer, and depth = 1
       represents the surface level."
34 )
35
36 # TODO : 9. Take user input for attack coordinates and display the result
   .
37 coor = input("Enter coordinates: ")
38 print(f"Hit at area centering {coor}")
```