1) Sentinal Values

a. What does the program below do? (Hint: What is the output if the user enters 1.5 then 2.0 and then 2.5 and then 0.)

```python
def myfunction():
    t = 0
    d = 0
    c = True
    while c:
        x = float(input('Enter a floating point value (0 when done): '))
        if x != 0:
            t = t + x
            d = d + 1
        else:
            c = False
    a = t / d
    return(a)

print(myfunction())
```

b. Write a program that prompts the user for input integers and accumulates the sum, until the total is greater than 100 or the user enters -999. The program should then print the sum.
2) Validating Input

a. Write a function called `get_five_letter_word()` that prompts the user for a word, checks that the word has five letters, and returns the word if it does. If not, it prompts the user to try again until the correct input is entered.

b. What could be a problem with the function above?

c. How can we fix it? Write the code.
3) Putting it all together:

a. Write a function called isbetween_bounds that tests if a passed integer value is between two bounds (inclusive). The function should take one integer value x and one list of two integers with the first integer being the lower bound and the second being the upper bound as parameters. The function should return a Boolean value.

b. Write a function called get_valid_user_guess() that takes a list of two integers as a parameter and prompts the user for a number guess between a lower bound and an upper bound, if the user enters an integer that is not between those bounds it prompts the user for a valid guess and continues to do so until the user enters a valid value. You should use the function you wrote above.
c. Recall the guess_the_number program from lecture 06:

Modify the code to use the functions written above and use a while loop for the main part of the game. The program should not count invalid guesses as one of the player’s three guesses.