**Problem 1:**

In the code cell below, create your own function to find the area of a different shape, and also write the code to call the function and display the output.

# Ask the user to enter the height

 # Since the height of the rectangle can be a decimal number,

 # convert the input to the float type

height = float(input('Enter the height of the rectangle: '))

 # Call the function you created above and accept the returned value

 # Ask the user to enter the width

 # Since the width of the rectangle can be a decimal number,

 # convert the input to the float type

width = float(input('Enter the width of the rectangle: '))

# Call the function you created above and accept the returned value

area = height \* width

# Display the output

print('The area of the rectangle = ' + str(area) + ' sq. units')

Enter the height of the rectangle: 10

Enter the width of the rectangle: 4

The area of the rectangle = 40.0 sq. units

Comments: You missed the most important part about creating your own function here.

## ****Problem 2:****

In the code cell below, create a method that convert temperature from fahrenheit to celcius and another method that does the reverse.

The beginning of the methods is given below:

def celToFah(celcius):

  fahrenheit = (celcius \* 9/5) + 32

  print('%.2f celcius is: %0.2f fahrenheit' %(celcius, fahrenheit))

def fahToCel(fahrenheit):

  celcius = (fahrenheit - 32) \* 5/9

  print('%.2f fahrenheit is: %0.2f celcius' %(fahrenheit, celcius))

# Get the temperature in celcius from user and display equivalent temperature in fahrenheit

cel = float(input('Enter the temperature in celcius:'))

return 'The temperature in Fahrenheit = ' + str(celToFah(cel))

# Get the temperature in fahrenheit from user and display equivalent temperature in celcius

fah = float(input('Enter the temperature in fahrenheit: '))

print('The temperature in celcius = ' + str(fahToCel(fah)))

Enter the temperature in celcius:10

 File "<ipython-input-5-89452f5b965c>", line 12

 return 'The temperature in Fahrenheit = ' + str(celToFah(cel))

 ^

SyntaxError: 'return' outside function

Comments: This needs to be a return statement. The error is because you are missing the return statement in your functions. Please read about this again

## ****Problem 3:****

Make sure you have read Chapter 6 from the Think Python book.

Write a boolean function that receives a number as a parameter and checks if it's even or odd, and display an appropropriate method.

Here is the expected output:

**Sample run 1:**

Enter a number: 23 Your number is odd!

**Sample run 2:**

Enter a number: 44 Your number is even!

# check if the input number is odd or even

# a number is even if division by 2 gives a reminder of 0

# if the remainder is 1, it is an odd number

number = int(input("Enter a number: "))

if (number % 2) == 0:

  return Your number is even!

else:

  return Your number is odd!

File "<ipython-input-4-3a7b155c37c3>", line 7 return Your number is even! ^ SyntaxError: invalid syntax

Comments: Again, this code needs to be within a function.