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 temperat
ure 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 tempe
rature 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.