Laboratory Assignment 0

Problem 1 - Greeting I

Write code that returns your name with a greeting as a string. The string should be: "`Hi all, This is` *`your_name`*`!`". (**Careful with punctuation marks.)** Your function name should be **problem1.**

```
>>> print( problem1() )
Hi all, This is Furkan Cayci!
```

Problem 2 - Greeting II

Write code that asks a name and returns the input as a string. The string should be: "`Input was` *`input`*". Your function name should be **problem2.** (**Hint**: use *input()* function to grab user input as a string and prepend "`Input was `" to the string and return it)

```
>>> print( problem2() )
Enter some input: Furkan Cayci
Input was Furkan Cayci
```

Problem 3 - Addition

Write code to accept two input numbers **as integers**, apply sum operation and return the result. Your function name should be **problem3.** (Only integer numbers will be tested for correctness.)

```
>>> print( problem3() )
Enter first number: 12
Enter second number: 15
27
```

Problem 4 - Subtraction

Write code to accept two input numbers **as floats**, apply subtract operation (first - second) and return the result. Your function name should be **problem4.** (Both integer and float numbers will be tested for correctness.)

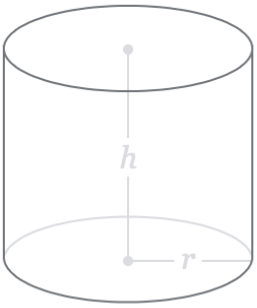
```
>>> print( problem4() )
Enter first number: 42.3
Enter second number: 15
27.299999999999997
```

Problem 5 - Modulo

Write code to accept two input numbers as integers, apply modulo operation and return the result. Your function name should be **problem5.** (Only integer numbers will be tested for correctness.)

```
>>> print( problem5() )
Enter first number: 121
Enter second number: 15
1
```

Problem 6 - Volume of a cylinder



Write code that will calculate the volume of a cylinder. First it should ask for the radius. Second, it should ask for the height. Then it should calculate the volume and return the result. All inputs should be treated as floats. *pi* should be taken as *3.141592*. Your function name should be **problem6.** (Both integer and float numbers will be tested for correctness.)

```
>>> print( problem6() )
Enter radius: 2.4
Enter height: 8
144.76455936
```

Problem 7 - Perimeter of a circle

Write code that will calculate the perimeter of a square. Ask for the length of a side. Then calculate the perimeter and return the result as a string with additional wordings. The string should be "The perimeter of the square is *value*." (Careful with the dot at the end) All inputs should be treated as floats. Your function name should be **problem7.** (Both integer and float numbers will be tested for correctness.)

```
>>> print( problem7() )
Enter one side: 4.2
The perimeter of the square is 16.8.
```