**What we want to test them on:**

* input()
* Type casting i.e. int(), float() only. Don’t type cast to string or float.
* isinstance()
* Exceptions: only test dividing by 0 for now, nothing else.
* Make sure you don’t use logical operators anywhere.

**What your question should look like:**

Make them define a function that should take one parameter. The parameter could be of any two data types of your choice (I am using string and int). Now, the body of your function should have at least two if statements.

Your first if statement would execute if the passed parameter has one of the two allowed data types. Within the body of this if statement, ask them to use input() once and make them do something using the input along with the passed parameter. This part shouldn’t return anything. It should just use a print statement. For example, I am asking them to print the passed parameter along with whatever the user inputs. They wouldn’t need type casting here.

Your third if statement would be like your first if statement. However, the data type would be different and here, you should ask them to use input() twice and then depending on the input, make them do some operation. **Make sure you use type casting here**. For example, in my question, when the passed parameter is integer, they would first ask the user to enter a number and then either 1 or 2(1 means multiplication and 2 means division). So, they would simply multiply or divide the passed number with the first inputted number. Here, you should ask them to check if both inputs are valid or not. If they aren’t valid, they should print “Invalid Inputs”. If everything is valid, and they were able to perform the calculation, you should return the result. //Nested if constructs allowed here only.

If the passed parameter is anything other than the allowed data type, simply print or return “Wrong data type”. You can do this in an else statement.

**My question:**

Write a function named userChoice, that takes one parameter. The parameter could be a string or an integer. Your task is to do the following:

* If the passed parameter is a string, ask the user to enter their name, and print the passed parameter along with the user input. In this case, your function wouldn’t return anything.
* If the passed parameter is integer, then ask the user to input another number. If the user enters 0, return “Invalid Input”. Once the user has correctly inputted the number, ask them to enter either 1 or 2. If the user enters 1, you’d multiply the passed parameter and the inputted number. However, if the user enters 2, you’d divide both numbers. After this, return the result.

Note: You should print “Invalid Input” if the user enters anything other than 1 or 2.

* Note that the passed parameter would never be 0. However, if the passed parameter is neither a strong nor an integer, your function should print “Wrong Data Type”
* Invoke the functions using the following parameter:

1. Passed parameter: “Hello”
2. Passed parameter: ‘c’
3. Passed parameter: 4
4. Passed parameter: 0.678 //It’d print wrong data type

**Rubric:**

Function Header—5 pts

Return Statement—2 pts

If statement for first datatype—5 pts

Body of first if statement and input—10 pts

If statement for second datatype—5 pts

Body of second if statement, input, and calculations—10 pts

Invoke the function 4 times --- 8 pts

Printing “Wrong Data Type” if the user enters float, etc – 5 pts