

Problem 1

Create the function **max** which gets an undefined number of non-keyword arguments and returns the maximum of those. In case the function is called without arguments, it should return the text “no numbers given”. Don’t use the in-built functions for calculating the maximum value.

Problem 2

Create a function that doesn’t take any arguments and returns the string “Hi”. Create 2 different decorators: one of them adds the string “, it’s me!” to the value returned by the function, the other one adds “<u>” and “</u>” to the value returned by the function. Use the decorator so that the final result looks like this:

<u> Hi, it’s me! </u>

Problem 3

Create the function **my_range(n)** which gets the value **n** of type int as an argument and yields the values 0, 1, ... , n-1, n until it reaches the value n+1 and prints “there are no values left”.

Problem 4

Create the modules **Productcheck.py** and **Customer.py** following the instructions below:

Productcheck.py

At the beginning of the file, outside the functions, create the dictionary **products** = {"candy": 10, "juice": 5, "pen": 50}.

check(product, num): Gets the name of the product and its quantity as arguments and checks if the product with the given quantity is present in the dictionary **products** (you should check if there is a key with the product name and if the value at that key is >= the given quantity). The function should return True or False accordingly.

Customer.py

buy(product, num, price): Gets the name of the purchased product, the quantity and the price as arguments and checks if the product with the given quantity is present using the

function **check(product, num)** from the module **Productcheck**. If the product with the given quantity is present, the function prints "You bought **product** and spent **num*price**", otherwise it prints "Sorry! We are out of this product.":

main(): The function calls the function **buy(product, num, price)** with some values of your choice.