

YBS213- INTRODUCTION TO ALGORITHM AND PROGRAMMING

TAKE-HOME EXAM 2

The aim of this take-home exam is to practice on functions. You are given a main program that uses some functions and for the program to work correctly, you should implement those functions. Therefore, you cannot finish this take-home exam without using functions. In order to run the program correctly, you must use the exact same input messages and function names that are given in this document.

You have a main program that is given, you will write three functions in order to complete this program. First function **getInput()**, this function will prompt a list of product from the user, and return the input. If input is incorrect, then it should ask the user to enter again. The format is given below, there must be at least two products, that are separated with “-”(dash). Your function must check this format.

Your input will be the same format as the following sample input line;

Please enter products: Apple-banana-milk-cucumber-tomato-potato

Second function, **conStrToList(p_str)**, will take this list of product as a string argument, convert it into a List and turn all letters to upper case, then return the List.

Sample:

[APPLE, BANANA, MILK, CUCUMBER, TOMATO, POTATO]

The last function will take this List as an argument and will put a price for each of the product using another new List in this function called **priceList**. The prices will be given from the user, so this function **putPrice(product_List)**, get one argument the product_List, and prompt price for each product from the user and save it in priceList in this function, if a price of a product is not entered, it should ask again until a price is entered.

Sample Price input:

Please enter price for APPLE: 10

Please enter price for BANANA: 5

Please enter price for MILK: 4,5

Please enter price for CUCUMBER: 3

Please enter price for TOMATO: 11

Please enter price for POTATO: 15

When you complete the functions correctly, you need to print each product with its price together.

Sample Output:

The Price list:

APPLE	10
BANANA	5
MILK	4,5
CUCUMBER	3
TOMATO	11
POTATO	15

You must submit your code for the solution before the date: 20.12.2019 FRIDAY 23:50

And your file name must be in the format below;

If your name is **Ali Mengüç**; then your file name must be like **alimenguc_hw2.py**
don't use turkish character in the program and in the file name.

The following line is the main program that you need to put in your .py file;

Main program, do not change. Do Copy these lines in to your .py file.

```
products = getInput()  
p_list = conStrToList(products)  
putPrice(p_list)
```

Sample Run 1:

Please enter products: apple-melon milk

Incorrect Format

Please enter products: apple-melon-milk

Please enter price for APPLE: 3

Please enter price for MELON: 4

Please enter price for MILK: 5

Price List:

APPLE	3
MELON	4
MILK	5

Sample Run 2:

Please enter products: apple

Incorrect Format

Please enter products: milk-melon

Please enter price for MILK: 5

Please enter price for Melon:

Error: Price not entered

Please enter price for Melon: 6

PRICE LIST:

MILK	5
MELON	6

CHECK AND VALIDATE YOUR PROGRAM BEFORE SUBMITTING.

IF FILE NAME IS WRONG, YOU WILL GET ZERO

IF PROGRAM DOES NOT PRODUCE CORRECT OUTPUT, YOU WILL GET ZERO.

GOOD LUCK.