**LAB # 8 :- “FUNCTIONS”**

***TASK # 1:-***

***CODE:-***

def num\_of\_words(length):  
 return len(length)  
  
  
length = input("Enter a string :")  
  
print("The number of words of the string are :",num\_of\_words(length))

***OUTPUT:-***

"C:\Users\Moavia computer\PycharmProjects\pythonProject1\venv\Scripts\python.exe" "C:/Users/Moavia computer/PycharmProjects/pythonProject1/main.py"

Enter a string :hahahaahaha

The number of words of the string are : 11

Process finished with exit code 0

***TASK # 2:-***

***CODE:-***

def prime\_number(num):  
 while True:  
 num += 1  
 for i in range (2,num):  
 if num%i==0:  
 break  
 else:  
 return num  
  
  
num = int(input("Enter a number : "))  
print("The closest prime number to this number is :",prime\_number(num))

***OUTPUT:-***

"C:\Users\Moavia computer\PycharmProjects\pythonProject1\venv\Scripts\python.exe" "C:/Users/Moavia computer/PycharmProjects/pythonProject1/main.py"

Enter a number : 15

The closest prime number to this number is : 17

Process finished with exit code 0

***TASK # 3:-***

***CODE:-***

def check\_multiple(num1,num2):  
 if (num1%num2==0 or num2%num1==0):  
 return True  
 else:  
 return False  
  
  
num1 = int(input("Enter the first number :"))  
num2 = int(input("Enter the second number :"))  
  
print(check\_multiple(num1,num2))

***OUTPUT:-***

"C:\Users\Moavia computer\PycharmProjects\pythonProject1\venv\Scripts\python.exe" "C:/Users/Moavia computer/PycharmProjects/pythonProject1/main.py"

Enter the first number :18

Enter the second number :3

True

Process finished with exit code 0

"C:\Users\Moavia computer\PycharmProjects\pythonProject1\venv\Scripts\python.exe" "C:/Users/Moavia computer/PycharmProjects/pythonProject1/main.py"

Enter the first number :17

Enter the second number :2

False

Process finished with exit code 0

***TASK # 4:-***

***CODE:-***

def lowest\_common\_multiple(num1,num2):  
 if (num1>num2 and num1%num2==0):  
 return num1  
 elif num2>num1 and num2%num1==0:  
 return num2  
 elif num1==num2:  
 return num1  
 else:  
 return (num1\*num2)  
  
  
  
num1 = int(input("Enter the first number : "))  
num2 = int(input("Enter the second number :"))  
  
print("The lowest common multiple of two numbers is :",lowest\_common\_multiple(num1,num2))

***OUTPUT:-***

"C:\Users\Moavia computer\PycharmProjects\pythonProject1\venv\Scripts\python.exe" "C:/Users/Moavia computer/PycharmProjects/pythonProject1/main.py"

Enter the first number : 2

Enter the second number :3

The lowest common multiple of two numbers is : 6

Process finished with exit code 0

***TASK # 5:-***

***CODE:-***

def same\_length\_lists(list1,list2):  
 if len(list1)==len(list2):  
 return True  
 else:  
 return False  
  
  
x = input("Enter the first list : ")  
y = input("Enter the second list :")  
list1 = []  
list1 = x.split(",")  
list2 = []  
list2 = y.split(",")  
  
print(same\_length\_lists(list1,list2))

***OUTPUT:-***

"C:\Users\Moavia computer\PycharmProjects\pythonProject1\venv\Scripts\python.exe" "C:/Users/Moavia computer/PycharmProjects/pythonProject1/main.py"

Enter the first list : 1,2,3,4

Enter the second list :5,6,7,8

True

Process finished with exit code 0

"C:\Users\Moavia computer\PycharmProjects\pythonProject1\venv\Scripts\python.exe" "C:/Users/Moavia computer/PycharmProjects/pythonProject1/main.py"

Enter the first list : 1,2,3

Enter the second list :2,5,7,4

False

Process finished with exit code 0

***TASK # 6:-***

***CODE:-***

def common\_letters(str\_1,str\_2):  
 list = []  
 for first in list1:  
 for second in list2:  
 if first==second and first not in list:  
 list.append(first)  
 print(list)  
  
  
  
str\_1 = input("Enter first string :")  
str\_2 = input("Enter second string :")  
list1=list(str\_1)  
list2= list(str\_2)  
print("The common letters are :",end="")  
common\_letters(str\_1,str\_2)

***OUTPUT:-***

"C:\Users\Moavia computer\PycharmProjects\pythonProject1\venv\Scripts\python.exe" "C:/Users/Moavia computer/PycharmProjects/pythonProject1/main.py"

Enter first string :burger

Enter second string :zinger burger

The common letters are :['b', 'u', 'r', 'g', 'e']

Process finished with exit code 0