**LAB # 7**

**TASK – 1 :-**

**CODE :-**

#Task-1  
x = input("Please enter a number between 1 and 15 :")  
y = input("Please enter " + x + " positive integers :")  
mylist = y.split(',')  
print(mylist)  
j = 0  
k = 1  
for i in range(1,len(mylist)):  
 p = mylist[j]  
 q = mylist[k]  
 if int(p) < int(q):  
 max = q  
 j +=1  
 else:  
 max = p  
 k += 1  
print("The maximum number of list is :" ,max)  
b = 0  
c = 1  
for a in range(1,len(mylist)):  
 t = mylist[b]  
 s = mylist[c]  
 if int(t) > int(s):  
 min = s  
 b +=1  
 else:  
 min = t  
 c += 1  
print("The minimum number of list is :" , min)

**OUTPUT:-**

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

Please enter a number between 1 and 15 :5

Please enter 5 positive integers :4,10,3,9,2

['4', '10', '3', '9', '2']

The maximum number of list is : 10

The minimum number of list is : 2

Process finished with exit code 0

**TASK – 2 :-**

**CODE :-**

x = input("Please enter a list of numbers seperated by commas :")  
mylist = x.split(',')  
l1 = []  
for i in mylist:  
 if(i not in l1):  
 l1.append(i)  
print("After the removal of duplacates , the new list is :",l1)

**OUTPUT:-**

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

Please enter a list of numbers seperated by commas :1,2,3,2,3,5,4,6,3,2,4,5,1

After the removal of duplacates , the new list is : ['1', '2', '3', '5', '4', '6']

**TASK – 3 :-**

**CODE :-**

#-----------COMMON WORDS IN TWO LISTS-------  
x = input("Please enter the first list elements seperated by commas : ")  
y = input("Please enter the second list elements seperated by commas :")  
l1 = x.split(',')  
l2 = y.split(',')  
print("The common words are : ", end="")  
for i in l1:  
 for j in l2:  
 if i==j:  
 print(i,end=",")  
 else:  
 print(end="")

**OUTPUT:-**

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

Please enter the first list elements seperated by commas : 5,"a","hello",75

Please enter the second list elements seperated by commas :9,"how","a",81,5

The common words are : 5,"a"

Process finished with exit code 0

**TASK – 4 :-**

**CODE :-**

x = input("Please input a list of strings seperated by commas : ")  
l1 = x.split(',')  
j = 0  
k = 1  
for i in range (1,len(l1)):  
 p = l1[j]  
 q = l1[k]  
 if len(p) < len(q):  
 longest\_string = q  
 j +=1  
 else:  
 longest\_string = p  
 k +=1  
print("The longest string is :" , longest\_string )

**OUTPUT:-**

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

Please input a list of strings seperated by commas : hello,how,are,you,hashir

The longest string is : hashir

**TASK – 5 :-**

**CODE :-**

mylist = input("Please input a sentence :")  
z = input("Enter the alphabet you want to remove :")  
print("The new sentence is : ", end="")  
for i in mylist:  
 for j in i:  
 if j!=z:  
 print(j,end="")

**OUTPUT:-**

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

Please input a sentence :hello how are you ahmed

Enter the alphabet you want to remove :a

The new sentence is : hello how re you hmed

Process finished with exit code 0

**TASK – 6 :-**

**CODE :-**

x = input("Please input a sentence : ")  
alphabets\_list=[["A","a"],["B","b"],["C","c"],["D","d"],["E","e"],["F","f"],["G","g"],["H","h"],["I","i"],["J","j"],["K","k"],["L","l"],["M","m"],["N","n"],["O","o"],["P","p"],["Q","q"],["R","r"],["S","s"],["T","t"],["U","u"],["V","v"],["W","w"],["X","x"],["Y","y"],["Z","z"]]  
newlist = []  
for i in range(len(alphabets\_list)):  
 count = 0  
 for j in range(2):  
 for z in range(len(x)):  
 if x[z] == alphabets\_list[i][j]:  
 count += 1  
 newlist.append(count)  
max\_word = newlist[0]  
for y in range(len(newlist)):  
 if (newlist[y])>max\_word:  
 max\_word = newlist[y]  
new\_word = newlist.index(max\_word)  
new\_word1 = alphabets\_list[new\_word][1]  
print("The character occurred maximum times: ", new\_word1)  
print(f"{new\_word1} was repeated {max\_word} times.")

**OUTPUT:-**

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

Please input a sentence : John was a carpenter and he knew how to work to earn money

The character occurred maximum times: e

e was repeated 6 times.

Process finished with exit code 0