**PROBLEM SOLVING AND PYTHON PROGRAMMING RECORD**

PYTHON PROGRAMMING USING FUNCTION

**EXERCISE NO:** 7

**DATE:** 04/02/2023

**1] CREATING A LIST IN LIBRARY AND USING ALL LIST FUNCTIONS.**

**PROGRAM**:

Lib\_list= ["Research","102","19/01/1956","William"]

print(Lib\_list)

Lib\_list.append("CSE")

print(Lib\_list)

Lib\_list.extend(["Periodicals,Newspapers"])

print(Lib\_list)

Lib\_list.insert(1,"Historicals")

print(Lib\_list)

Lib\_list[2]= "issued"

print(Lib\_list)

Lib\_list.remove("issued")

print(Lib\_list)

Lib\_list[0:4]

print(Lib\_list)

Lib\_list.pop(3)

print(Lib\_list)

**OUTPUT:**

['Research', '102', '19/01/1956', 'William']

['Research', '102', '19/01/1956', 'William', 'CSE']

['Research', '102', '19/01/1956', 'William', 'CSE', 'Periodicals,Newspapers']

['Research', 'Historicals', '102', '19/01/1956', 'William', 'CSE', 'Periodicals,Newspapers']

['Research', 'Historicals', 'issued', '19/01/1956', 'William', 'CSE', 'Periodicals,Newspapers']

['Research', 'Historicals', '19/01/1956', 'William', 'CSE', 'Periodicals,Newspapers']

['Research', 'Historicals', '19/01/1956', 'William', 'CSE', 'Periodicals,Newspapers']

['Research', 'Historicals', '19/01/1956', 'CSE', 'Periodicals,Newspapers']

**EXERCISE NO:** 7

**DATE**: 04/02/2023

**2] CREATE A TUPLE FOR COMPONENTS OF A CAR AN D SHOW ALL THE OPERATIONS.**

**PROGRAM:**

Tesla= ("Engine",2023,"TN592303",5,"Wheel")

BMW= (2020,1.5,5,4,4,"TN591826","brakes")

Car\_price= (250000,100000,50000,75000)

print(Tesla)

print(BMW)

print(len(Tesla))

print(len(BMW))

print(Tesla[1:3])

print(BMW[-1:-3])

print(Tesla + BMW)

print(BMW\*2)

print(BMW.count(4))

print(Tesla.index("Wheel"))

print(min(Car\_price))

print(max(Car\_price))

print(sorted(Car\_price))

print(sum(Car\_price))

**OUTPUT:**

('Engine', 2023, 'TN592303', 5, 'Wheel')

(2020, 1.5, 5, 4, 4, 'TN591826', 'brakes')

5

7

(2023, 'TN592303')

()

('Engine', 2023, 'TN592303', 5, 'Wheel', 2020, 1.5, 5, 4, 4, 'TN591826', 'brakes')

(2020, 1.5, 5, 4, 4, 'TN591826', 'brakes', 2020, 1.5, 5, 4, 4, 'TN591826', 'brakes')

2

4

50000

250000

[50000, 75000, 100000, 250000]

475000

**EXERCISE NO:** 7

**DATE:** 04/02/2023

**3]CREATE A SET TO ACCEPT MORE VALUES AND PRINT THE ELEMENTS AFTER REMOVING THE DUPLICATE ELEMENTS.**

**PROGRAM:**

list=[]

for i in range(0,5):

list.append(i)

list.append(4)

list.append(5)

print("Created list which contains duplicate elements : ",list)

x=set(list)

print("After creating set removes duplicate elements : ",x)

**OUTPUT:**

Created list which contains duplicate elements : [0, 4, 5, 1, 4, 5, 2, 4, 5, 3, 4, 5, 4, 4, 5]

After creating set removes duplicate elements : {0, 1, 2, 3, 4, 5}

**EXERCISE NO:** 7

**DATE**: 04/02/2023

**4] WRITE A PROGRAM TO PRINT THE SPECIFICATIONS OF THE LAPTOP USING DICTIONARY WITH ITS OPERATIONS.**

**PROGRAM:**

laptop={ "Brand":"Asus",

"Model":"Vivobook 15",

"Processor":"Intel Core i5",

"RAM":8,

"Storage":"1TB",

"Graphics":"NVIDIA GeForce RTX 3080",

"Screen\_size":15.6 }

print("Laptop Specification : ")

print("Brand : ",laptop["Brand"])

print("Model : ",laptop["Model"])

print("Processor : ",laptop["Processor"])

print("RAM : ",laptop["RAM"])

print("Storage : ",laptop["Storage"])

print("Graphics : ",laptop["Graphics"])

print("Screen Size : ",laptop["Screen\_size"])

**OUTPUT**:

Laptop Specification :

Brand : Asus

Model : Vivobook 15

Processor : Intel Core i5

RAM : 8

Storage : 1TB

Graphics : NVIDIA GeForce RTX 3080

Screen Size : 15.6