**List items in Library**

**AIM:**

To create a list of items, present in a library and do all the operations on it.

**SOURCE CODE:**

lib = ["Fiction", "Academics", "Novel", "Science Fiction", "Horror"]

print("Length of list: ", len(lib))

lib.append("Fictional Novel")

print("After append: ", lib)

lib.insert(0, "Story Books")

print("After insert: ", lib)

more\_lib = ["Novel", "Science", "Projects"]

conc= lib + more\_lib

print("List concatenation: ",conc)

lib.remove("Horror")

print("After remove: ", lib)

pop= lib.pop()

print("Popped value: ", pop)

print("After pop: ", lib)

print("Index of Novel: ", lib.index("Novel"))

print("Count of Novel: ", lib.count("Novel"))

lib.sort()

print("After sort: ", lib)

lib.reverse()

print("After reverse: ", lib)

print("Minimum value: ", min(lib))

print("Maximum value: ", max(lib))

print("List repetition: ", lib \* 3)

**OUTPUT:**

list= ['magazine', 'documents', 'Maps', 'Audio book', 'journals']

append list = ['magazine', 'documents', 'Maps', 'Audio book', 'journals', 'novel']

insert list = ['magazine', 'documents', 'Maps', 'Audio book', 'database', 'journals', 'novel']

extend list = ['magazine', 'documents', 'Maps', 'Audio book', 'database', 'journals', 'novel', 'manuscript', 'Newspaper']

concatenation = ['manuscript', 'Newspaper', 'python', 'micro form', 'Document']

Repetition = ['magazine', 'documents', 'Maps', 'Audio book', 'database', 'journals', 'novel', 'manuscript', 'Newspaper', 'magazine', 'documents', 'Maps', 'Audio book', 'database', 'journals', 'novel', 'manuscript', 'Newspaper']

**Tuple items of car components**

**AIM:**

To create a tuple for components of a car and show all the operations.

**SOURCE CODE:**

car\_components = ("Hood","Turbo","Doors","Steering","Doors")

print("Length of tuple: ", len(car\_components))

print("Index of Doors: ", car\_components.index("Doors"))

print("Count of 2: ", car\_components.count("Doors"))

print("Minimum value: ", min(car\_components))

print("Maximum value: ", max(car\_components))

print("Tuple repetition: ", car\_components \* 3)

more\_car\_components = ("Spoilers","Rims","Alloy Wheels")

print("Tuple concatenation: ", car\_components + more\_car\_compon

**OUTPUT:**

Length of tuple: 5

Index of Doors: 2

Count of 2: 2

Minimum value: Doors

Maximum value: Turbo

Tuple repetition: ('Hood', 'Turbo', 'Doors', 'Steering', 'Doors', 'Hood', 'Turbo', 'Doors', 'Steering',

'Doors', 'Hood', 'Turbo', 'Doors', 'Steering', 'Doors')

Tuple concatenation: ('Hood', 'Turbo', 'Doors', 'Steering', 'Doors', 'Spoilers', 'Rims', 'Alloy Wheels')

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**Remove duplicate of a set**

**AIM:**

To Create a set to accept more values and print the elements after removing the duplicate content.

**SOURCE CODE:**

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}

**Laptop specification using Dictionary**

**AIM:**

To write a program to print the specification of the laptop using dictionary with its operation.

**SOURCE CODE:**

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