1.tuple items present in car

Program

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\_components)

**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')

2.list of items present in library

Program:

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

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

liblist.append("Fictional Novel")

print("After append: ", liblist)

liblist.insert(0, "Story Books")

print("After insert: ", liblist)

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

conc= liblist + more\_liblist

print("List concatenation: ",conc)

liblist.remove("Horror")

print("After remove: ", liblist)

popped = liblist.pop()

print("Popped value: ", popped)

print("After pop: ", liblist)

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

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

liblist.sort()

print("After sort: ", liblist)

liblist.reverse()

print("After reverse: ", liblist)

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

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

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

**OUTPUT:**

Length of list: 5

After append: ['Fiction', 'Academics', 'Novel', 'Science Fiction', 'Horror', 'Fictional Novel']

After insert: ['Story Books', 'Fiction', 'Academics', 'Novel', 'Science Fiction', 'Horror', 'Fictional Novel']

List concatenation: ['Story Books', 'Fiction', 'Academics', 'Novel', 'Science Fiction', 'Horror', 'Fictional

Novel', 'Novel', 'Science', 'Projects']

After remove: ['Story Books', 'Fiction', 'Academics', 'Novel', 'Science Fiction', 'Fictional Novel']

Popped value: Fictional Novel

After pop: ['Story Books', 'Fiction', 'Academics', 'Novel', 'Science Fiction']

Index of Novel: 3

Count of Novel: 1

After sort: ['Academics', 'Fiction', 'Novel', 'Science Fiction', 'Story Books']

After reverse: ['Story Books', 'Science Fiction', 'Novel', 'Fiction', 'Academics']

Minimum value: Academics

Maximum value: Story Books

List repetition: ['Story Books', 'Science Fiction', 'Novel', 'Fiction', 'Academics', 'Story Books', 'Science

Fiction', 'Novel', 'Fiction', 'Academics', 'Story Books', 'Science Fiction', 'Novel',

'Fiction', 'Academics']

3.removing duplicate of set

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}

4.laptop specification using dictionaries

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