**CREATE A LIST FOR ITEMS PRESENT IN A LIBRARY AND DO ALL THE OPERATIONS ON IT.**

**PROGRAM:**

list1=[]

list2=['magazines','news papers']

list1.append('books')

print(list1)

list1.extend(list2)

print(list1)

list1.insert(1,'e-books')

print(list1)

print(list1[0:2])

print(list1[4::-1])

print(len(list1))

list1.sort()

print(list1)

print(list1.count('books'))

print(list1.index('magazines'))

list1[2]='literature'

print(list1)

print('magazines' in list1)

print(list1+list2)

print(list1\*2)

list1.remove('e-books')

print(list1)

list1.pop(2)

print(list1)

del(list1[1])

print(list1)

list1.clear()

print(list1)

**OUTPUT:**

['books']

['books', 'magazines', 'news papers']

['books', 'e-books', 'magazines', 'news papers']

['books', 'e-books']

['news papers', 'magazines', 'e-books', 'books']

4

['books', 'e-books', 'magazines', 'news papers']

1

2

['books', 'e-books', 'literature', 'news papers']

False

['books', 'e-books', 'literature', 'news papers', 'magazines', 'news papers']

['books', 'e-books', 'literature', 'news papers', 'books', 'e-books', 'literature', 'news papers']

['books', 'literature', 'news papers']

['books', 'literature']

['books']

[]

**CREATE A TUPLE FOR COMPONENTS OF A CAR AND SHOW ALL THE OPERATIONS.**

**PROGRAM:**

tup1=('BMW','red','high quality tyres',2021)

print(tup1)

print(tup1[0:2])

print(tup1[3::-1])

print(len(tup1))

print(tup1.count('BMW'))

print(tup1.index('red'))

print(2021 in tup1)

tup2=(2000000,'automatic brake')

print(tup1+tup2)

print(tup1\*2)

**OUTPUT:**

('BMW', 'red', 'high quality tyres', 2021)

('BMW', 'red')

(2021, 'high quality tyres', 'red', 'BMW')

4

1

1

True

('BMW', 'red', 'high quality tyres', 2021, 2000000, 'automatic brake')

('BMW', 'red', 'high quality tyres', 2021, 'BMW', 'red', 'high quality tyres', 2021)

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

**PROGRAM:**

list1=[]

for i in range(10):

n=int(input("Enter number:"))

list1.append(n)

set1=set(list1)

print("Before removing duplicate elements",list1)

print("After removing duplicate elements",set1)

**OUTPUT:**

Enter number:0

Enter number:1

Enter number:2

Enter number:3

Enter number:4

Enter number:0

Enter number:1

Enter number:2

Enter number:3

Enter number:4

Before removing duplicate elements [0, 1, 2, 3, 4, 0, 1, 2, 3, 4]

After removing duplicate elements {0, 1, 2, 3, 4}

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

**PROGRAM:**

dict1={"Brand":'Dell',"Screen size":'16 inch',"RAM":'12GB'}

print(dict1)

dict1["ROM"]='1TB'

print(dict1)

print(dict1.keys())

print(dict1.values())

dict1.pop("Screen size")

print(dict1)

dict1.clear()

print(dict1)

**OUTPUT:**

{'RAM': '12GB', 'Screen size': '16 inch', 'Brand': 'Dell'}

{'ROM': '1TB', 'RAM': '12GB', 'Screen size': '16 inch', 'Brand': 'Dell'}

dict\_keys(['ROM', 'RAM', 'Screen size', 'Brand'])

dict\_values(['1TB', '12GB', '16 inch', 'Dell'])

{'ROM': '1TB', 'RAM': '12GB', 'Brand': 'Dell'}

{}