Darshan UNIVERSITY

# Python for Data Science - 2305CS303

## Lab - 6

Roll No. : 111

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### 1. WAP to iterate over a set.

In [1]:
```
s1 = {10, 20, 30, 40, 50}
for i in s1:
    print(i)
```

```
50
20
40
10
30
```

### 2. WAP to convert set into list, string and tuple.

In [2]:
```
s2 = {1, 2, 3, 4}

l1 = list(s2)
str1 = ''.join(str(i) for i in s2)
t1 = tuple(s2)

print(l1)
print(str1)
print(t1)
```

```
[1, 2, 3, 4]
1234
(1, 2, 3, 4)
```

## 3. WAP to check if two lists have at-least one element common.

In [3]:
```
l1 = [1, 2, 3, 4]
l2 = [5, 6, 3, 7]
l3 = False

for i in l1:
    if i in l2:
        l3 = True
        break

print(l3)
```

```
True
```

## 4. WAP to remove duplicates from list.

In [4]:
```
l1 = [1, 2, 2, 3, 4, 4, 5]
l2 = []
for i in l1:
    if i not in l2:
        l2.append(i)
print(l2)
```

```
[1, 2, 3, 4, 5]
```

## 5. WAP to find unique words in the given string.

In [1]:
```
s1 = "Dhara Maru lMAO"
l1 = s1.split()
l2 = []
for word in l1:
    if word not in l2:
        l2.append(word)
print(l2)
```

```
['Dhara', 'Maru', 'lMAO']
```

## 6. WAP to iterate over a dictionary.

In [6]:
```
d1 = {'a': 1, 'b': 2, 'c': 3}
for key in d1:
    print(key, d1[key])
```

```
a 1
b 2
c 3
```

## 7. WAP to find the sum of all items (values) in a dictionary given by user. (Assume: values are numeric).

In [8]:
```
d1 = {}
n = int(input("Enter number of items: "))
for i in range(n):
    key = input("Enter key: ")
    value = int(input("Enter value: "))
    d1[key] = value

total = 0
for v in d1.values():
    total += v

print("Sum:", total)
```

```
Enter number of items:  3
Enter key:  a
Enter value:  10
Enter key:  b
Enter value:  20
Enter key:  c
Enter value:  30
Sum: 60
```

## 8. WAP to sort dictionary by key or value.

In [9]:
```
d1 = {'b': 3, 'a': 1, 'c': 2}

sorted_by_key = dict(sorted(d1.items()))
sorted_by_value = dict(sorted(d1.items(), key=lambda x: x[1]))

print("Sorted by key:", sorted_by_key)
print("Sorted by value:", sorted_by_value)
```

```
Sorted by key: {'a': 1, 'b': 3, 'c': 2}
Sorted by value: {'a': 1, 'c': 2, 'b': 3}
```

## 9. WAP to handle missing keys in dictionaries.

- Example : Given, dict1 = {'a': 5, 'c': 8, 'e': 2}

- if you look for key = 'd', the message given should be 'Key Not Found', otherwise print the value of 'd' in dict1.

In [10]:
```
dict1 = {'a': 5, 'c': 8, 'e': 2}
key = 'd'

if key in dict1:
    print(dict1[key])
```

```
else:
    print("Key Not Found")
```

```
Key Not Found
```