

Programs of Tuple, Set & Dictionary

In [2]:

```
# 1) write a program to create a tuple from a given list & reverse it
```

```
l=[5,4,7,8,7]
t=tuple(l)
print(l, " -->", t)
print("In reverse order:", t[::-1])
```

```
[5, 4, 7, 8, 7] --> (5, 4, 7, 8, 7)
In reverse order: (7, 8, 7, 4, 5)
```

In [11]:

```
# 2) write a program to create list of tuples where each tuple is a pair of elements 1st
# second element is its unicode
```

```
l=[]
a=ord("A")
z=ord("Z")
for i in range(a,z+1):
    t=(chr(i), i)
    l.append(t)
print(l)
```

```
[('A', 65), ('B', 66), ('C', 67), ('D', 68), ('E', 69), ('F', 70), ('G', 71), ('H', 72), ('I', 73), ('J', 74), ('K', 75), ('L', 76), ('M', 77), ('N', 78), ('O', 79), ('P', 80), ('Q', 81), ('R', 82), ('S', 83), ('T', 84), ('U', 85), ('V', 86), ('W', 87), ('X', 88), ('Y', 89), ('Z', 90)]
```

In [16]:

```
# 3) create two sets from a given set of no. to separate even and odd no.
```

```
s=input("Enter Elements of set by giving space:")
s=s.split()
s_base={int(i) for i in s}
s_even={int(i) for i in s if int(i)%2==0}
s_odd={int(i) for i in s if int(i)%2>0}
print("given Set Elements:", s_base)
print("Set of Even Elements:", s_even)
print("Set of odd Elements:", s_odd)
```

```
Enter Elements of set by giving space:1 25 4 6 2 1 2 3 6 4 5 7 8 9 6 5 4
2 6 5 5 5 5 6
given Set Elements: {1, 2, 3, 4, 5, 6, 7, 8, 9, 25}
Set of Even Elements: {8, 2, 4, 6}
Set of odd Elements: {1, 3, 5, 7, 9, 25}
```

In [32]:

```
# 4) sort a dictionary by its keys in decending order
d={1:"Aakash",2:"Aliya",10:"Ankush",3:"Ashutosh",5:"Abhishek",7:"Aman",9:"Ankit",4:"Abha
print(d)
# print(d.keys())
d=d.items()
d=list(d)
d.sort(reverse=True)
# print(d)
d=dict(d)
print(d)
```

```
{1: 'Aakash', 2: 'Aliya', 10: 'Ankush', 3: 'Ashutosh', 5: 'Abhishek', 7:
'Aman', 9: 'Ankit', 4: 'Abhay', 11: 'Arslaan', 6: 'Afiya', 8: 'Animesh'}
{11: 'Arslaan', 10: 'Ankush', 9: 'Ankit', 8: 'Animesh', 7: 'Aman', 6: 'Afi
ya', 5: 'Abhishek', 4: 'Abhay', 3: 'Ashutosh', 2: 'Aliya', 1: 'Aakash'}
```

In [54]:

```
# 5) write a program to find maximum size batch code from a dictionary where key values
# and data values are size of the batch
```

```
s= input("Enter Batch codes for Dictionary by giving space: ")
s=s.split()
l=[i for i in s]
d=[(i,len(i)) for i in l]
d=dict(d)
print(d)
m=d.values()
mx=max(list(m))
i=list(m).index(mx)
print(mx,i)
m=list(d.keys())
mx=m[i]
print("Max size Batch code: '",mx,"'\t\tSize:",d.get(mx))
```

```
Enter Batch codes for Dictionary by giving space: nikhil_32 ankush_10 sand
eep_52 pankaj_36 nikhlesh_34 suhani_35
```

```
{'nikhil_32': 9, 'ankush_10': 9, 'sandeep_52': 10, 'pankaj_36': 9, 'nikhle
sh_34': 11, 'suhani_35': 9}
```

```
11 4
```

```
Max size Batch code: ' nikhlesh_34 '          Size: 11
```

In []: