range

In [1]:
```
range(6)
```

Out[1]:
```
range(0, 6)
```

In [2]:
```
a = range(6)
print(a)
```

```
range(0, 6)
```

In [3]:
```
# range(number after the ending value)- starts from zero if no start v
for i in range(5):
    print(i)
print("Done")
```

```
0
1
2
3
4
Done
```

In [4]:
```
# range(starting value, number after the ending value)
for i in range(1,7):
    print(i)
print("Done")
```

```
1
2
3
4
5
6
Done
```

In [5]:
```
# range(starting value, number after the ending value, increment value
for i in range(2,31,5):
    print(i)
print("Done")
```

```
2
7
12
17
22
27
Done
```

In [6]:
```
sum = 0
for i in range(10):
    sum = sum+i
    print(sum)
```

```
0
1
3
6
10
15
21
28
36
45
```

List

In [7]:
```
Subjects = ['Physics','Chemistry','Maths']
Games = ['Football','Cricket','Tennis']
```

In [8]:
```
print(Subjects)
```

```
['Physics', 'Chemistry', 'Maths']
```

In [9]:
```
#Append - adds the element at the end of the list
Subjects.append('History')
print(Subjects)
```

```
['Physics', 'Chemistry', 'Maths', 'History']
```

In [11]:
```
#Insert - you can specify the index where you want to insert
Subjects.insert(2,'Biology')
print(Subjects)
```

```
['Physics', 'Chemistry', 'Biology', 'Biology', 'Maths', 'History']
```

In [12]:
```
#Extend - Add another list in existing list
Subjects.extend(Games)
print(Subjects)
```

```
['Physics', 'Chemistry', 'Biology', 'Biology', 'Maths', 'History',
'Football', 'Cricket', 'Tennis']
```

In [13]:
```
#Remove - delete an element
Subjects.remove("Cricket")
print(Subjects)
```

```
['Physics', 'Chemistry', 'Biology', 'Biology', 'Maths', 'History',
'Football', 'Tennis']
```

In [14]:
```
#clear - clears the entire list
```

In [15]:
```
#pop- delete the elemt in the index value specified
Subjects.pop(5)
print(Subjects)
```

```
['Physics', 'Chemistry', 'Biology', 'Biology', 'Maths', 'Football',
'Tennis']
```

In [16]:
```
# Reverse
Subjects.reverse()
print(Subjects)
```

```
['Tennis', 'Football', 'Maths', 'Biology', 'Biology', 'Chemistry',
'Physics']
```

In [17]:
```
#Repetition
print(Subjects*2)
```

```
['Tennis', 'Football', 'Maths', 'Biology', 'Biology', 'Chemistry',
'Physics', 'Tennis', 'Football', 'Maths', 'Biology', 'Biology', 'Che
mistry', 'Physics']
```

Tuple

In [18]:
```
Fruits = ('Apple','Banana','Cherry')
Vegetables = ('Cucumber', 'Beetroot', 'Onions','Potatao')
print(Fruits)
print(Vegetables)
```

```
('Apple', 'Banana', 'Cherry')
('Cucumber', 'Beetroot', 'Onions', 'Potatao')
```

In [19]:
```
#Indexing
print(Fruits[1])
```

```
Banana
```

In [20]:
```
#Slicing - Extracting smaller sequence
print(Fruits[0:2])
```

```
('Apple', 'Banana')
```

In [21]:
```
print(Fruits*4)
```

```
('Apple', 'Banana', 'Cherry', 'Apple', 'Banana', 'Cherry', 'Apple',
'Banana', 'Cherry', 'Apple', 'Banana', 'Cherry')
```

In [22]:
```
#count - No of occurence of the element in the sequence
Letters = ('A','B','C','B','B','D')
print(Letters.count("B"))
```

```
3
```

In [23]:
```
#Concat - Two tuple into a new tuple
Kitchen = Fruits + Vegetables
print(Kitchen)
```

```
('Apple', 'Banana', 'Cherry', 'Cucumber', 'Beetroot', 'Onions', 'Pot
atao')
```

In [24]:
```
# Tuple within a list
Word = [('A','B','C'),('E','F','G')]
```

In [25]:
```
print(Word[0][2])
```

```
C
```

In [26]:
```
Word.append(('K','L'))
print(Word)
```

```
[('A', 'B', 'C'), ('E', 'F', 'G'), ('K', 'L')]
```

In [ ]:
```

```