Range and Enumerate Function ¶

range() function

In [ ]:

```
>> it will work on only integers
>> range(start_index, end_index, step_size)
step_size   : optional
start_index : included
end_index   :  excluded

>>
```

In [2]:

```python
for i in range(1,11): # 1 to 10 for loop : 1 ot 10
    print(i)
```

```
1
2
3
4
5
6
7
8
9
10
```

In [5]:

```python
for vishal in range(1,5): # 1 to 4 for loop : 1 ot 4
    print(vishal)
```

```
1
2
3
4
```

In [11]:

```python
for i in range(1,21,2):    # step size 2 : 2 - 1 : 1
    print(i)
```

```
1
3
5
7
9
11
13
15
17
19
```

In [13]:

```python
# profram to create table of 5
for i in range(5,51,5):  # step_size : 5 : 5-1 = 4
    print(i)
```

```
5
10
15
20
25
30
35
40
45
50
```

In [17]:

```python
# profram to create table of 5
for i in range(5,51):
    if i%5==0:
        print(i)
```

```
5
10
15
20
25
30
35
40
45
50
```

In [19]:

```python
for j in range(1,6):
    print(j , end = " ")
```

```
1 2 3 4 5
```

In [25]:

```
1  for j in range(1,5.5):   # range () fn will work only with integers (whole numbers )
2      print(j , end = " ")
```

```
--------------------------------------------------------------------------
--
TypeError                              Traceback (most recent call las
t)
Cell In[25], line 1
----> 1 for j in range(1,5.5):  # range () fn will work only with integer
s (whole numbers )
      2     print(j , end = " ")

TypeError: 'float' object cannot be interpreted as an integer
```

In [26]:

```
1  name="Yash Joshi"
2  for ch in name :
3      print(ch)
4
```

```
Y
a
s
h

J
o
s
h
i
```

In [28]:

```
1  name="Yash Joshi"
2  for i in range(0,len(name)) :
3      print(name[i])
```

```
Y
a
s
h

J
o
s
h
i
```

```
1  name="Yash Joshi"
2  for i in range(0,len(name)) :
3      print(f" Character at {i} ---- > {name[i]}")
```

```
Character at 0 ---- > Y
Character at 1 ---- > a
Character at 2 ---- > s
Character at 3 ---- > h
Character at 4 ---- >
Character at 5 ---- > J
Character at 6 ---- > o
Character at 7 ---- > s
Character at 8 ---- > h
Character at 9 ---- > i
```

enumerate() function

```
1  stud_name="Akanksha"
2  stud_name
```

```
'Akanksha'
```

```
1  stud_name="Akanksha"
2  for ch in stud_name:
3      print(ch)
```

```
A
k
a
n
k
s
h
a
```

In [36]:

```python
stud_name="Akanksha"
index=0
for ch in stud_name:
    print(index , ch)
    index=index+1
```

```
0 A
1 k
2 a
3 n
4 k
5 s
6 h
7 a
```

In [40]:

```python
stud_name="Akanksha"

for index , ch in enumerate(stud_name):
    print(index , ch)


```

```
0 A
1 k
2 a
3 n
4 k
5 s
6 h
7 a
```

In [47]:

```python
city_list=["Pune",'Ambajogai','Mumbai','Delhi','Chennai','Hydrabad']

for index , city in enumerate(city_list):
    print(f" city name at {index} is  {city}")

```

```
 city name at 0 is  Pune
 city name at 1 is  Ambajogai
 city name at 2 is  Mumbai
 city name at 3 is  Delhi
 city name at 4 is  Chennai
 city name at 5 is  Hydrabad
```

```
1  city_list={"Pune",'Ambajogai','Mumbai','Delhi','Chennai','Hydrabad'}
2  print(city_list, type(city_list))
3  for index , city in enumerate(city_list):
4      print(f" city name at {index} is  {city}")
```

```
{'Hydrabad', 'Chennai', 'Ambajogai', 'Pune', 'Delhi', 'Mumbai'} <class 's
et'>
 city name at 0 is  Hydrabad
 city name at 1 is  Chennai
 city name at 2 is  Ambajogai
 city name at 3 is  Pune
 city name at 4 is  Delhi
 city name at 5 is  Mumbai
```

```
1
```