Day_4_For_Loop(DATA_MINDS)

September 6, 2023

[1]:
```
l=[1,2,3,4,5]
```

[3]:
```
for i in l:
    print(i,type(i))
```

```
1 <class 'int'>
2 <class 'int'>
3 <class 'int'>
4 <class 'int'>
5 <class 'int'>
```

[4]:
```
d=["Virat","Rohit","Yash","happy"]
```

[5]:
```
for i in d:
    print(i)
```

```
Virat
Rohit
Yash
happy
```

[6]:
```
d
```

[6]:
```
['Virat', 'Rohit', 'Yash', 'happy']
```

[12]:
```
#if for loop is able to complete itself then only else will execute

for i in d:
    print(i)
else:
    print("Do something")
```

```
Virat
Rohit
Yash
happy
Do something
```

[14]:
```
d
```

[14]:
```
['Virat', 'Rohit', 'Yash', 'happy']
```

[16]:
```
for i in d:
    if i=="Rohit":
        break
    print(i)
```

```
Virat
```

[17]:
```
d
```

[17]:
```
['Virat', 'Rohit', 'Yash', 'happy']
```

[18]:
```
for i in d:
    if i=="Rohit":
        break
    print(i)
else:
    print("Execute this if for loop is able to complete itself")
```

```
Virat
```

[19]:
```
d
```

[19]:
```
['Virat', 'Rohit', 'Yash', 'happy']
```

[20]:
```
for i in d:
    if i=="Rohit":
        continue
    print(i)
```

```
Virat
Yash
happy
```

[21]:
```
d
```

[21]:
```
['Virat', 'Rohit', 'Yash', 'happy']
```

[22]:
```
for i in d:
    if i=="Rohit":
        continue
    print(i)
else:
    print("Execute this if for loop is able to complete itself")
```

```
Virat
Yash
happy
Execute this if for loop is able to complete itself
```

[23]:
```
#Range()function is generator function that is used for generating the values
 ↪from a particulat range

range(5)
```

[23]:
```
range(0, 5)
```

[24]:
```
list(range(5))
```

[24]:
```
[0, 1, 2, 3, 4]
```

[25]:
```
set(range(6))
```

[25]:
```
{0, 1, 2, 3, 4, 5}
```

[26]:
```
list(range(0,5,1))
```

[26]:
```
[0, 1, 2, 3, 4]
```

[28]:
```
list(range(0,20,2))
```

[28]:
```
[0, 2, 4, 6, 8, 10, 12, 14, 16, 18]
```

[29]:
```
list(range(-10,0))
```

[29]:
```
[-10, -9, -8, -7, -6, -5, -4, -3, -2, -1]
```

[30]:
```
#RANGE()FUNCTION - WITH THIS FUNCTION WE ACN EASILY PRODUCE THE DATA IN A RANGE
```

[31]:
```
d
```

[31]:
```
['Virat', 'Rohit', 'Yash', 'happy']
```

[32]:
```
d[::-1]
```

[32]:
```
['happy', 'Yash', 'Rohit', 'Virat']
```

[33]:
```
d
```

[33]:
```
['Virat', 'Rohit', 'Yash', 'happy']
```

[40]:
```
list(range(len(d)))
```

[40]: [0, 1, 2, 3]

[36]:
```
for i in range(len(d)):
    print(d[i])
```

```
Virat
Rohit
Yash
happy
```

[41]:
```
for i in range(len(d)-1,-1,-1):
    print(d[i])
```

```
happy
Yash
Rohit
Virat
```

[42]:
```
f=[21,54,63,1,25,0,78,30,788,103,463,25,86]
```

[43]:
```
f
```

[43]: [21, 54, 63, 1, 25, 0, 78, 30, 788, 103, 463, 25, 86]

[46]:
```
#THIS IS HOW WE PRODUCE THE EVEN INDEXES

list(range(0,len(f),2))
```

[46]: [0, 2, 4, 6, 8, 10, 12]

[47]:
```
#THIS IS HOW WE PRODUCE THE IDD INDEXES

list(range(0,len(f),1))
```

[47]: [0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]

[48]:
```
list(range(0,len(f),2))
```

[48]: [0, 2, 4, 6, 8, 10, 12]

[49]:
```
#THIS IS HOW WE FETCH THE EVEN INDEX ELEMENTS

for i in range(0,len(f),2):
    print(f[i])
```

```
21
63
25
```

```
78
788
463
86
```

[53]:
```
a=[1,5,2,4,6,1,8,9,1,7,3,4,5,55,53,14]
```

[54]:
```
a
```

[54]: [1, 5, 2, 4, 6, 1, 8, 9, 1, 7, 3, 4, 5, 55, 53, 14]

[55]:
```
#SUM()FUNCTION IS USED FOR SUM THE TOTAL VALUES
```

[55]: 178

[57]:
```
#WE CREATE THE SUN()FUNCTION WITH THE HELP OF FOR LOOP FUNCTION

result=0
for i in a:
    result=result+i
result
```

[57]: 178

[58]:
```
#WE DONE SAME THING ON TUPLES

t=(1,2,3,4,5,6,7,8,9)
```

[59]:
```
for i in t:
    print(i)
```

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

[62]:
```
result=0
for i in t:
    result=result+i
result
```

[62]: 45

[63]:
```
s={21,"Virat",25.4,"Yash"}
```

[64]:
```
s
```

[64]:
```
{21, 25.4, 'Virat', 'Yash'}
```

[66]:
```
for i in s:
    print(i)
```

```
25.4
Yash
21
Virat
```

[68]:
```
name="virat tiwari"
```

[69]:
```
name
```

[69]:
```
'virat tiwari'
```

[70]:
```
for i in name:
    print(i)
```

```
v
i
r
a
t

t
i
w
a
r
i
```

[71]:
```
v={"name":"virat","sub":"data science","tool":"machine learning","database":
 ↪"aws azure"}
```

[72]:
```
v
```

[72]:
```
{'name': 'virat',
 'sub': 'data science',
 'tool': 'machine learning',
 'database': 'aws azure'}
```

[75]:
```
v["name"]
```

[75]:
```
'virat'
```

[77]:
```
v.keys()
```

[77]:
```
dict_keys(['name', 'sub', 'tool', 'database'])
```

[78]:
```
v.values()
```

[78]:
```
dict_values(['virat', 'data science', 'machine learning', 'aws azure'])
```

[80]:
```
for i in v.keys():
    print(v[i])
```

```
virat
data science
machine learning
aws azure
```

[84]:
```
for i in v.values():
    print(i)
```

```
virat
data science
machine learning
aws azure
```

[85]:
```
v.items()
```

[85]:
```
dict_items([('name', 'virat'), ('sub', 'data science'), ('tool', 'machine
learning'), ('database', 'aws azure')])
```

[88]:
```
for i in v.items():
    print(i)
```

```
('name', 'virat')
('sub', 'data science')
('tool', 'machine learning')
('database', 'aws azure')
```