Day_3_Basic_Python(DATA_MINDS)

September 6, 2023

[3]:
```
#DICTIONARY-In the dict we have key and value pair
#In the dict we used {} brackets
```

[4]:
```
d={}
```

[5]:
```
type(d)
```

[5]:
```
dict
```

[11]:
```
f={"Name":"Virat"}
```

[12]:
```
f
```

[12]:
```
{'Name': 'Virat'}
```

[13]:
```
g={"name":"virat tiwari","age":"23","email":"tv@gmail.com","no":"4569712"}
```

[14]:
```
g
```

[14]:
```
{'name': 'virat tiwari', 'age': '23', 'email': 'tv@gmail.com', 'no': '4569712'}
```

[15]:
```
g["name"]
```

[15]:
```
'virat tiwari'
```

[16]:
```
g["no"]
```

[16]:
```
'4569712'
```

[18]:
```
g["age"]
```

[18]:
```
'23'
```

[19]:
```
a={"name":"virat","mail":"te@gmail","name":"virat tiwari"}
```

[20]:
```
a
```

[20]:
```
{'name': 'virat tiwari', 'mail': 'te@gmail'}
```

[21]:
```
a["name"]
```

[21]:
```
'virat tiwari'
```

[23]:
```
d2={"Subject":"Data science","skills":["python","machine learning","NLP","Computer vision","DL"]}
```

[24]:
```
d2
```

[24]:
```
{'Subject': 'Data science',
 'skills': ['python', 'machine learning', 'NLP', 'Computer vision', 'DL']}
```

[25]:
```
d2["skills"]
```

[25]:
```
['python', 'machine learning', 'NLP', 'Computer vision', 'DL']
```

[26]:
```
d2["skills"][0:2]
```

[26]:
```
['python', 'machine learning']
```

[32]:
```
s2={"number":[25,45,2,943,0,126,22],"assignmenet":(2,8,6,7,1023,640),"launch date":{414,95,120}}
```

[33]:
```
s2
```

[33]:
```
{'number': [25, 45, 2, 943, 0, 126, 22],
 'assignmenet': (2, 8, 6, 7, 1023, 640),
 'launch date': {95, 120, 414}}
```

[36]:
```
s2["assignmenet"]
```

[36]:
```
(2, 8, 6, 7, 1023, 640)
```

[42]:
```
#THIS IS HOW WE ADD ELEMENTS TO THE DICT

s2["friends"]=["yash","rohit","happy"]
```

[43]:
```
s2
```

[43]:
```
{'number': [25, 45, 2, 943, 0, 126, 22],
 'assignmenet': (2, 8, 6, 7, 1023, 640),
 'launch date': {95, 120, 414},
 'friends': ['yash', 'rohit', 'happy']}
```

[44]:
```
#DEL ()FUNCTION IS USED FOR DELETING THE KEYS FROM THE DICT

del s2["number"]
```

[45]:
```
s2
```

[45]:
```
{'assignmenet': (2, 8, 6, 7, 1023, 640),
 'launch date': {95, 120, 414},
 'friends': ['yash', 'rohit', 'happy']}
```

[46]:
```
#KEYS() FUNCTION IS USED FOR GETTING ONLY KEYS FROM THE DICT

s2.keys()
```

[46]:
```
dict_keys(['assignmenet', 'launch date', 'friends'])
```

[47]:
```
list(s2.keys())
```

[47]:
```
['assignmenet', 'launch date', 'friends']
```

[48]:
```
#VALUES()FUNCTION IS USED FOR GETTING ONLY VALUES FROM THE DICT

s2.values()
```

[48]:
```
dict_values([(2, 8, 6, 7, 1023, 640), {120, 414, 95}, ['yash', 'rohit',
'happy']])
```

[49]:
```
#LIST()FUNCTION IS USED FOR TYPECASTING DICT INTO LIST

list(s2.values())
```

[49]:
```
[(2, 8, 6, 7, 1023, 640), {95, 120, 414}, ['yash', 'rohit', 'happy']]
```

[52]:
```
#ITEMS()FUNCTION IS USED FOR GETTING ALL ELEMENTS IN THE FORM OF ITMES IN LIST

list(s2.items())
```

[52]:
```
[('assignmenet', (2, 8, 6, 7, 1023, 640)),
 ('launch date', {95, 120, 414}),
 ('friends', ['yash', 'rohit', 'happy'])]
```

[58]:
```
s2.pop('assignmenet')
```

[58]:
```
(2, 8, 6, 7, 1023, 640)
```

[59]:
```
s2
```

[59]:
```
{'launch date': {95, 120, 414}, 'friends': ['yash', 'rohit', 'happy']}
```

[61]:
```
#CONTROL FLOW OR DECION MAKING STATEMENT

#EX - IF , ELSE ,  ELIF
```

[71]:
```
#INPUT()FUNCTION IS USED FOR TAKING FROM THE USER

#SMALL BATCH ALLOCATION SYSTEM ON BEHALF OF MARKS

Name=input("Enter your full name  : ")
marks=int(input("Enter your marks : "))
if marks>=80:
    print("you will be a part of A1 batch")
elif marks>=60 and marks<80:
    print("You will be a part of A2 batch")
elif marks>=40 and marks<60:
    print("You will be a part of A3 batch")
else:
    print("You will be a part of A4 batch")
print("All the very best", Name )
```

```
Enter your full name  :  Virat Tiwari
Enter your marks 100
```

```
you will be a part of A1 batch
All the very best Virat Tiwari
```

[76]:
```
price=int(input("Enter the price : "))
if price>1000:
    print("I will not purchase")
else:
    print("I will purchase")
```

```
Enter the price :  457
```

```
I will purchase
```

[82]:
```
#NESTED LOOP OR CONDITIONAL STATEMENT

price=int(input("Enter the price : "))
if price>1000:
    print("I will not purchase")
    if price>5000:
        print("This is too high")
    elif price<2000:
        print("Its ok to buy")
elif price<1000:
```

```
    print("I will buy definitely")
else:
    print("Not interested at all")
```

```
Enter the price :  245
I will buy definitely
```

[84]:
```
l=[0,2,5,4,7,8,20,1,65,4,2]
```

[85]:
```
l
```

[85]:
```
[0, 2, 5, 4, 7, 8, 20, 1, 65, 4, 2]
```

[86]:
```
#for loop will fetch the data elements one by one untill its end the series

for i in l:
    print(i)
```

```
0
2
5
4
7
8
20
1
65
4
2
```

[90]:
```
#THIS IS HOW WE ADD ONE AND UPDATE THE LIST

l1=[]
for i in l:
    print(i+1)
    l1.append(i+1)
l1
```

```
1
3
6
5
8
9
21
2
66
```

```
5
3
```

[90]:
```
[1, 3, 6, 5, 8, 9, 21, 2, 66, 5, 3]
```

[91]:
```
v=["Virat","Data science","On going course","skills"]
```

[92]:
```
v
```

[92]:
```
['Virat', 'Data science', 'On going course', 'skills']
```

[96]:
```
#THIS IS HOW WE APPEND AND CAPITALIZE THE LETTERS OF NAMES IN FOR LOOP

v1=[]
for i in v:
    print(i)
    v1.append(i.upper())
```

```
Virat
Data science
On going course
skills
```

[97]:
```
v1
```

[97]:
```
['VIRAT', 'DATA SCIENCE', 'ON GOING COURSE', 'SKILLS']
```

[98]:
```
b=[1,8,6,3,"Virat","classs",24.02,3,54,"rohit"]
```

[99]:
```
#THIS IS HOW WE SEPERATE THE NUMBERS AND STRING FROM THE LIST
# WE USE CONDITIONAL STATEMENT IN FOR LOOP FOR THIS OPERATION

b1_num=[]
b2_str=[]
for i in b:
    if type(i)==int or type(i)==float:
        b1_num.append(i)
    else:
        b2_str.append(i)
```

[100]:
```
b1_num
```

[100]:
```
[1, 8, 6, 3, 24.02, 3, 54]
```

[101]:
```
b2_str
```

[101]:
```
['Virat', 'classs', 'rohit']
```

[ ]: