

IBM ASSIGNMENT -BATCH AI - 1

1. string = "Hi there Sam ";

```
print (string split())
```

output=['Hi', 'there', 'sam']

2.plant ="Earth"

diameter= 12742

```
print('The diameter of {} is {} kilometer'. format (plan ef, diameter));
```

output:the dimeter of the earth is 12742 kilometer

3.d = {'k',[1,2,3,{'trichy':['oh','man','inception', { 'target'[1,2,3,'hello']}]}}}]

```
print(d['k1'][3][\"trichy\"][3][\"target\"][3])
```

output=hello

4a).import numpy as np

```
array=np.zeros(10)
```

```
print("An array of 10zero")
```

```
print(array)
```

```
output= [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]
```

```
4b) import numpy as np
```

```
array=np.five(10)*5
```

```
print("An array of 10 five: ")
```

```
print(array)
```

```
output = [5. 5. 5. 5. 5. 5. 5. 5. 5. 5.]
```

```
5)import numpy as np
```

```
array=np.arange(20,35,2)
```

```
print("Array of all the even integer from 20 to 35")
```

```
print(array)
```

```
output= 20,22,24,26,28,30,32,34.
```

6) import numpy as np

```
x = np.arange (0,9).reshape(3,3)
```

```
print(x)
```

output [[0 ,1 ,2]

[3 ,4 ,5]

[6 ,7 ,8]]

7) import numpy as np

```
a = np. array ([1,2,3])
```

```
b = np. array ([4,5,6])
```

```
c = np. concatenate((a,b,),1)
```

```
print(c)
```

output=[[1,2,3]

[4,5,6]]

8)import pandas as pd

```
data=['Name'['tom', 'nick', 'krish', 'jack'], Age:[20,21,19,18]
```

```
df=pd.DataFrame(data)
```

df

output=

	Name	Age
0	Tom	20
1	nick	21
2	krish	19
3	Jack	18

9) from datetime import timedelta, date

def daterange (date1,date2);

for n in range (int((date2-date).days)+1`):

yield date1+ timedelta(n)

start_dt=date(2023,1,1)

end_dt=date(2023,10,2)

for dt in daterange(start_dt,end_dt);

print9dt.strftime("yy-%m-%d"))

output=1st jan 2023

10th feb 2023

```
10)import pandas as pd

import numpy as np

list=[[1,'aaa',22],[2,'bbb',25],[3,'ccc',24]]

data=pd.dataframe(li)

print(data)
```

```
output=1 aaa 21
```

```
2 bbb 2.5
```

```
3 ccc 24
```