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)import numpy as np
array=np.arrange(20,35,2)
print("Array of all the even integer from 20 to 35")
print(array)
output= 20,22,24,25,26,28,30,32,34.
```

```
6) import numpy as np
 x = np.arrange (0,9)reshape(3,3)
 print(x)
 output [ [0 ,1 ,2]
      [3 ,4 ,5]
      [8, 7, 6]
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)
```

```
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 if in_ range (int((date2-date).days)+1`):
yield date1+ timedelta(n)
start_dt=date(2023,1,1)
end_dt=date=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