

ASSIGNMENT-1

BATCH-B5-5M1E(AI)

```
1. string = "Hi there Sam "
```

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

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

```
2. planet = "Earth"
```

```
diameter= 12742
```

```
print("The diameter of {} is {} kilometer".format(planet, diameter));
```

```
output:the diameter 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 10 zeros")
```

```
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=[&#39;Name&#39;[&#39;tom&#39;, &#39;nick&#39;, &#39;krish&#39;, &#39;jack&#39;],  
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 if 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("&quot;yy-%m-%d&quot;))
```

output=1st jan 2023

10th feb 2023

```
10)import pandas as pd

import numpy as np

list=[[1,&#39;aaa&#39;,22],[2,&#39;bbb&#39;,25],[3,&#39;ccc&#39;,24]]

data=pd.dataframe(li)

print(data)
```

output=1 aaa 21

2 bbb 2.5

3 ccc 24