Assignment -1

Assignment Date	19 September 2022
Student Name	Miss Kiruthika M
Student Roll Number	620119106043
Maximum Marks	2 Marks

Question-1:

1.Split This String:

S="Hi there sam!"
Ans: S.split()
          print(S)
Output :
['Hi', 'there', 'sam!']

```python
1  que="Hi there sam!"
2  ans=que.split()
3  print(ans)
```

```
['Hi', 'there', 'sam!']
>
```

Question-2:

2. Use format() to print the following String:

print('The diameter of the {} is {}
kilometers'.format('Earth',
'12742'))

```python
1  print('The diameter of the {} is {} kilometers'
       .format('Earth', '12742'))
```

```
The diameter of the Earth is 12742 kilometers
>
```

Question-3

3. in This Dictionary grab the word "hello"

d={'k1':[1,2,3,{'tricky':['oh','man','Inception',{'target':[1,2,3,'hello']}]}]}

Ans:

Question-4

4.1.Create an array of 10 Zeros?

```
import numpy as np
a=np.zeros(10)
print(a)
```


4.2.Create an array of 10 fives?

```
import numpy as np
a=np.ones(10)*5
print(a)
```


Question-5

5.Create an Array of All the Even Integers from 20 to 35?

```
import numpy as np
array=np.arange(20,31,2)
print("array of even integers from 20 to 30")
print(array)
```

Question-6
6.Create a 3X3 matrix with values ranging from 0to8

```python
import numpy as np
m=np.arange(0,9).reshape(3,3)
print(m)
```

```
main.py                    Run        Shell

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

Question-7
Concatenate a and b
a=np.array([1,2,3]),b=np.array([4,5])

```python
import numpy as np
a=np.array([1,2,3])
b=np.array([4,5,6])
con=np.concatenate((a,b),axis= 0)
print(con)
```

Interactive Python Course

```
main.py                    Run        Shell                    Clear

1  import numpy as np                   [1 2 3 4 5 6]
2  a=np.array([1,2,3])                  >
3  b=np.array([4,5,6])
4  con=np.concatenate((a,b),axis= 0)
5  print(con)
```

Question-8
8.Create a Dataframe with 3 rows and 2 coloumns import pandas as pd?
import pandas as pd
lst=[[1,'aaa',22],[2,'bbb',25],[3,'ccc',24]]
df=pd.DataFrame(lst,columns=['Sno','Alphabets','val'])
print(df)

```
main.py                    [ ]   (C)   Run        Shell

1   import pandas as pd                            Sno Alphabets  val
2   lst=[[1,'aaa',22],[2,'bbb',25],[3,'ccc',24]]   0    1        aaa   22
3   df=pd.DataFrame(lst,columns=['Sno','Alphabets' 1    2        bbb   25
        ,'val'])                                   2    3        ccc   24
4   print(df)                                      >
```

Question-9

9. **Generate the series of Dates form 1st Jan,2023 to 10th Feb,2023?**

```
import datetime
import pandas as pd
test_date = datetime.datetime.strptime("01-01-2023", "%d-%m-%Y")
K = 10
date_generated = pd.date_range(test_date, periods=K)
print(date_generated.strftime("%d-%m-%Y"))
```

```
main.py                    [ ]   (C)   Run        Shell

1   import datetime                                Sno Alphabets  val
2   import pandas as pd                            0    1        aaa   22
3   test_date = datetime.datetime.strptime("01-01-2023" 1  2   bbb   25
        , "%d-%m-%Y")                              2    3        ccc   24
4   K = 10                                         >
5   date_generated = pd.date_range(test_date, periods=K
        )
6   print(date_generated.strftime("%d-%m-%Y"))
```

Question-10

10. **Create 2D list to DataFrame**

```
import pandas as pd
lst = [[1,'aaa', 22], [2,'bbb', 25], [3,'ccc', 24]]
# creating df object with columns specified
df = pd.DataFrame(lst, columns =['sno','name', 'number'])
print(df )
```

```
main.py                    [ ]   (C)   Run        Shell

1                                                  sno name  number
2   import pandas as pd                            0    1    aaa    22
3   lst = [[1,'aaa', 22], [2,'bbb', 25], [3,'ccc', 24]] 1  2  bbb   25
                                                   2    3    ccc    24
4   # creating df object with columns specified    >
5   df = pd.DataFrame(lst, columns =['sno','name',
        'number'])
6   print(df )
```