ASSESMENT 1

ASSESMENT DATE	16-09-2022
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STUDENT ROLL NUMBER	713119205003
MAXIMUM MARKS	2 Marks

1. Split this string

```
S = "Hi there Sam!"
a=s.split()
print(a)
```

OUTPUT

```
['Hi', 'there', 'Sam!']
```

2.Output should be: The diameter of Earth is 12742 kilometers.

```
planet = "Earth"
diameter = 12742
print('The diameter of {} is {} kilometer.' .format(planet,diameter));
```

OUTPUT

```
The diameter of Earth is 12742 kilometer.
```

3.In this nest dictionary grab the word "hello"

```
d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]}
print (d['k1'][3]["tricky"][3]['target'][3])
```

OUTPUT

```
hello
```

4.1 Create an array of 10 zeros?

4.2 Create an array of 10 fives?

```
array = np.zeros(10)
print("An array of 10 zeros: ")
print(array)

array = np.ones(10)*5
print ("An array of 10 fives:")
print(array)
```

OUTPUT

```
[ ] An array of 10 zeros:
    [0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]
    An array of 10 fives:
    [5. 5. 5. 5. 5. 5. 5. 5. 5. 5.]
```

5. Create an array of all the even integers from 20 to 35

```
import numpy as np
array=np.arange(20,35,2)
print("Array of of even integers from 20 to 35")
print(array)
```

OUTPUT

```
Array of of even integers from 20 to 35
[20 22 24 26 28 30 32 34]
```

6.Create a 3x3 matrix with values ranging from 0 to 8

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

OUTPUT

```
[[0 1 2]
 [3 4 5]
 [6 7 8]]
```

7. Concatinate a and b

a = np.array([1, 2, 3]), b = np.array([4, 5, 6])

```
a = np.array([1,2,3])
b = np.array([4,5,6])
c=a+b
print(c)
```

OUTPUT

```
[5 7 9]
```

8. Create a dataframe with 3 rows and 2 columns

```
import pandas as pd
data={'name':['john','jai','rose'],'age':[20,22,45]}
df=pd.DataFrame(data)
print(df)
```

OUTPUT

```
   name  age
0  john   20
1   jai   22
2  rose   45
```

9. Generate the series of dates from 1st Jan, 2023 to 10th Feb, 2023

```
import datetime
start_date=datetime.date(2023, 1, 1)
end_date = datetime.date(2023 ,2 ,10)
delta=datetime.timedelta(days=1 )
while(start date<=end date):
  print(start_date,end="\n")
  start_date += delta
```

OUTPUT

```
2023-01-01
2023-01-02
2023-01-03
2023-01-04
2023-01-05
2023-01-06
2023-01-07
2023-01-08
2023-01-09
2023-01-10
2023-01-11
2023-01-12
2023-01-13
2023-01-14
2023-01-15
2023-01-16
2023-01-17
2023-01-18
2023-01-19
2023-01-20
2023-01-21
2023-01-22
2023-01-23
2023-01-24
2023-01-25
2023-01-26
2023-01-27
```

10.Create 2D list to DataFrame

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

```
lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24]]
print (lists)
```

OUTPUT

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