Assignment -1

Python Programming

Assignment Date	19 September 2022
Student Name	Mohana B
Maximum Marks	2 Marks

Question-1:

Split this string

Solution:

```
s = "Hi there Sam!"
words = s.split(' ')
print(words)
```

Question-2:

Use .format() to print the following string

Solution:

```
planet = "Earth"
diameter = 12742
txt = "The diameter of {planet} is {diameter} kilometers.".format(planet = "Earth
print(txt)
```

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

Question-3:

In this nest dictionary grab the word "hello"

Solution:

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

```
d1=d['k1'][3]
```

d2= d1['tricky'][3]

```
d2= d1['tricky'][3]
```

```
d2['target'][3]
```

```
'hello'
```

Question-4:

Create an array of 10 zeros?
Create an array of 10 fives?

Solution:

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

```
arr1=np.ones(10)*5
```

```
print(arr)
```

```
[0. 0. 0. 0. 0. 0. 0. 0. 0. 0.]
```

```
print(arr1)
```

```
[5. 5. 5. 5. 5. 5. 5. 5. 5. 5.]
```

Question-5:

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

Solution:

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

```
print(arreven)
```

```
[20 22 24 26 28 30 32 34]
```

Question-6:

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

Solution:

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

```
print(matrix)
```

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

Question-7:

Concatinate a and b

Solution:

```
a=np.array([1,2,3])
b=np.array([4,5,6])
concat=np.concatenate((a,b),axis=0)
```

```
print(concat)
```

```
[1 2 3 4 5 6]
```

Question-8:

Create a dataframe with 3 rows and 2 columns

Solution:

```
import pandas as pd
```

```
lists = {
    "a":["1","10"],
    "b":["2","20"],
    "c":["3","30"]
        }
```

```
pd.DataFrame(lists)
```

	a	b	c
0	1	2	3
1	10	20	30

Question-9:

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

Solution:

```
from datetime import date
start_date = date(2023,1,1)
end_date = date(2023,2,11)
[date.fromordinal(i) for i in range(start_date.toordinal(), end_date.toordinal())
```

Question-10:

Create 2D list to DataFrame

Solution:

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

```
df = pd.DataFrame(lists,columns = ['Sno','Name','Age'])
print(df)
```

```
   Sno Name  Age
0    1  aaa   22
1    2  bbb   25
2    3  ccc   24
```