

### Assignment -1

|                     |                 |
|---------------------|-----------------|
| Assignment Date     | 21 October 2022 |
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| Student Roll Number | 210519205060    |
| Maximum Marks       | 2 Marks         |

# Basic Python

## 1. Split this string

```
""" s = "Hi there  
Sam!"
```

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

```
"""*`italicized text`*## 2. Use .format() to print the following string.
```

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

```
"""
```

```
planet = "Earth" diameter  
= 12742
```

```
planet = "Earth" diameter = 12742 planet = "Earth" diameter =  
12742 print('The diameter of {} is {} kilometer.'  
.format(planet,diameter)); """## 3. In this nest dictionary grab the  
word "hello"
```

```
"""
```

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

```
lst = [1,2,[3,4],[5,[100,200,['hello']],23,11],1,7]
```

```
lst = [1,2,[3,4],[5,[100,200,['hello']],23,11],1,7]
```

```
a=lst[3][1][2]; print(a)
```

```
"""# Numpy"""
```

```
import numpy as np
```

```
"""## 4.1 Create an array of 10 zeros?
```

```
## 4.2 Create an array of 10 fives?
```

```
"""
```

```
import numpy as np
```

```
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)
```

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

```
import numpy as np array=np.arange(20,36,2)
```

```
print("Array of all the even integers from 20 to 35")
```

```
print(array)
```

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

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

```
"""## 7. Concatenate a and b
## a = np.array([1, 2, 3]), b = np.array([4, 5, 6])
"""
```

```
import numpy as np
```

```
a      = np.array([1, 2, 3])
print(a)
```

```
b      = np.array([4, 5, 6])
print(b)
```

```
print('\n---Result of a and b---') print(np.concatenate((a,
b)))
```

```
"""# Pandas
```

```
## 8. Create a dataframe with 3 rows and 2 columns
"""
```

```
import pandas as pd
```

```
import pandas as pd
```

```
import numpy as np
```

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

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

```
import pandas as pd pd.date_range(start='01/01/2023',end='02/10/2023')
```

```
"""## 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]]
```

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

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

```
import pandas as pd
```

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

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