

# Assignment-1

## PythonProgramming

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MaximumMarks	2

## BasicPython

### 1.Splitthisstring

```
In [ ]: s="HithereSam!"
```

```
In [ ]: s="HithereSam!"s=
s.split()print(s)
;

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

### 2.Use.format()toprintthefollowingstring.

Outputshouldbe:TheiameterofEarthis12742kilometers.

```
In [ ]: planet =
"Earth"diameter=
12742
```

```
In [ ]: planet =
"Earth"diameter=
12742
print('Theiameterof{}is{}kilometers.'.format(planet,diameter));

TheiameterofEarthis12742kilometers.
```

### 3.Inthisnestdictionary grabthe word"hello"

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

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

hello
```

# Numpy

```
In [ ]: import numpy as np
```

## 4.1 Create an array of 10 zeros?

## 4.2 Create an array of 10 fives?

```
In [ ]: array=np.zeros(10)
```

```
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```

```
[0.0.0.0.0.0.0.0.0.0.]
```

```
In [ ]: array=np.ones(10)*5 print(array)
```

```
[5.5.5.5.5.5.5.5.5.5.]
```

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

```
In [ ]: print(np.arange(20,35,2))
```

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

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

```
In [ ]: (np.arange(0,9).reshape((3,3)))
```

```
Out [ ]: array([[0, 1, 2],
               [3, 4, 5],
               [6, 7, 8]])
```

## 7. Concatenate a and b

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

```
In [ ]: a=np.array([1,2,3])
b=np.array([4,5,6]) print(np.
concatenate((a,b)))
```

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

# Pandas

```
Print(array)
```

## 8. Create a data frame with 3 rows and 2 columns

```
In [ ]: import pandas as pd  
import numpy as np
```

```
In [ ]: df = np.random.randint(10, size=(3, 2)) df
```

```
Out[ ]: array([[4, 9],  
              [9, 5],  
              [2, 7]])
```

## 9. Generate the series of dates from 1st Jan, 2023 to

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