

# IBM ASSIGNMENT 1

1.Split this string:

```
S = "Hi there sam!"
```

```
Words = s.split(',')
```

```
Print(words)
```

2.Use. format() to print the following

```
My string = " The diameter of the {} is {} kilometer"
```

```
Print(my_string.format("earth","12742"))
```

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

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

4.1Create an array 10 zeros?

```
arr1 = []
```

```
for I in range(0,10):
```

```
    arr1.append(0)
```

```
print(arr1)
```

4.2 create an of 10 fives?

```
Arr1 = []
```

```
For I in range(0,10):
```

```
    Arr1.append(5)
```

```
Print(arr1)
```

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

```
Start = 20
```

```
End = 35
```

```
For num in range(start, end + 1)
```

```
If num % 2 == 0:
```

```
    Print(num, end = " ")
```

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

```
Import numpy as np
```

```
X = np.arange(0,8).reshape(3,3)
```

```
Print(x)
```

7. Concatenate a and b

```
Import numpy as np
```

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

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

```
num = np.concatenate((a,b), axis = 0)
```

```
print (num)
```

8. Create the dataframe with 3 rows and 2 columns

```
Import pandas as pd
```

```
Data = [['tom ',10], ['nick',20], ['carry',30]]
```

```
df = pd.DataFrame(data, columns=['name', 'age'])
```

```
df
```

9. Generate the series of date from 1<sup>st</sup> jan,2023 to 10<sup>th</sup> feb 2023?

```
Import datetime
```

```
Import pandas as pd
```

```
Test-date = datetime.datetime.strptime("01-01-2023", "%d-%m-%Y")
```

```
Date-generated = pd.date_range(test-date, periods=k)
```

```
Print(date-generated.strftime("%d-%m-%Y"))
```

#### 10. Create 2D list to dataframe

```
Import pandas as pd
```

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

```
Df = pd.DataFrame(Lst, columns=['tag', 'numbers'])
```

```
Print(df)
```