

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

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

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

```
The diameter of Earth is 12742Kilometers
```

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

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

```
import numpy as np  
array=np.ones(10)*5  
print("An array of 10 zeros:")  
print(array)
```

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

```
import numpy as np  
array=np.arange(20,35,2)  
print("Array of all the even integers from 30 to 70")  
print(array)
```

```
Array of all the even integers from 30 to 70  
[20 22 24 26 28 30 32 34]
```

```
import numpy as np
```

```
import numpy as np
array=np.arange(20,35,2)
print("Array of all the even integers from 30 to 70")
print(array)
```

Array of all the even integers from 30 to 70
[20 22 24 26 28 30 32 34]

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

conacatenated string is [[0 1 2]
[3 4 5]
[6 7 8]]

```
import numpy as np
a = np.array([1,2,3])
b = np.array([4,5,6])
print("conacatenated string is")
np.concatenate((a,b), axis=0)
```

conacatenated string is

array([1, 2, 3, 4, 5, 6])

```
# Importing Pandas to create DataFrame
import pandas as pd
data = [1,2,3]
# Creating Empty DataFrame and Storing it in variable
df = pd.DataFrame(data,columns = [''])

# Printing Empty DataFrame
print(df)
```

```
# Importing Pandas to create DataFrame
import pandas as pd
data = [1,2,3]
# Creating Empty DataFrame and Storing it in variable
df = pd.DataFrame(data,columns = [''])

# Printing Empty DataFrame
print(df)
```

```
0  1
1  2
2  3
```

```
import datetime
import pandas as pd

# initializing date
test_date = datetime.datetime.strptime("01-1-2023", "%d-%m-%Y")

# initializing K
K = 41

date_generated = pd.date_range(test_date, periods=K)
print(date_generated.strftime("%d-%m-%Y"))
```

```
Index(['01-01-2023', '02-01-2023', '03-01-2023', '04-01-2023',
      '05-01-2023', '06-01-2023', '07-01-2023', '08-01-2023', '09-01-2023',
      '10-01-2023', '11-01-2023', '12-01-2023', '13-01-2023', '14-01-2023',
      '15-01-2023', '16-01-2023', '17-01-2023', '18-01-2023', '19-01-2023',
      '20-01-2023', '21-01-2023', '22-01-2023', '23-01-2023', '24-01-2023',
      '25-01-2023', '26-01-2023', '27-01-2023', '28-01-2023', '29-01-2023',
      '30-01-2023', '31-01-2023', '01-02-2023', '02-02-2023', '03-02-2023',
      '04-02-2023', '05-02-2023', '06-02-2023', '07-02-2023', '08-02-2023',
      '09-02-2023', '10-02-2023'],
      dtype='object')
```

```
import pandas as pd
```

```
import datetime
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# initializing date
test_date = datetime.datetime.strptime("01-1-2023", "%d-%m-%Y")

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```
Index(['01-01-2023', '02-01-2023', '03-01-2023', '04-01-2023', '05-01-2023', '06-01-2023', '07-01-2023', '08-01-2023', '09-01-2023', '10-01-2023', '11-01-2023', '12-01-2023', '13-01-2023', '14-01-2023', '15-01-2023', '16-01-2023', '17-01-2023', '18-01-2023', '19-01-2023', '20-01-2023', '21-01-2023', '22-01-2023', '23-01-2023', '24-01-2023', '25-01-2023', '26-01-2023', '27-01-2023', '28-01-2023', '29-01-2023', '30-01-2023', '31-01-2023', '01-02-2023', '02-02-2023', '03-02-2023', '04-02-2023', '05-02-2023', '06-02-2023', '07-02-2023', '08-02-2023', '09-02-2023', '10-02-2023'],
      dtype='object')
```

```
import pandas as pd

# List1
lists = [[1, 'aaa', 22], [2, 'bbb', 25], [3, 'ccc', 24],]

# creating df object with columns specified
df = pd.DataFrame(lists, columns=['id', 'name', 'age'])
print(df)
```

```
0  1  aaa  22
1  2  bbb  25
2  3  ccc  24
```