

# HRISHIKESH G KULKARNI - 21BAI1660

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

```
In [ ]: #Task - 01
num_observations = 4
num_features = 4

random_values = np.random.rand(num_observations, num_features)
df = pd.DataFrame(random_values)
```

```
In [ ]: df.head()
```

```
Out[ ]:
```

	0	1	2	3
0	0.757029	0.323729	0.046493	0.793787
1	0.144639	0.624590	0.734539	0.095155
2	0.157595	0.842829	0.456237	0.909123
3	0.364209	0.799444	0.187103	0.959299

```
In [ ]: #Task - 02
df.columns = ['Random value 1', 'Random value 2', 'Random value 3', 'Random value 4']
```

```
In [ ]: df.head()
```

```
Out[ ]:
```

	Random value 1	Random value 2	Random value 3	Random value 4
0	0.757029	0.323729	0.046493	0.793787
1	0.144639	0.624590	0.734539	0.095155
2	0.157595	0.842829	0.456237	0.909123
3	0.364209	0.799444	0.187103	0.959299

```
In [ ]: #Task - 03
df.describe()
```

Out [ ]:

	Random value 1	Random value 2	Random value 3	Random value 4
<b>count</b>	4.000000	4.000000	4.000000	4.000000
<b>mean</b>	0.355868	0.647648	0.356093	0.689341
<b>std</b>	0.285733	0.235650	0.304226	0.402139
<b>min</b>	0.144639	0.323729	0.046493	0.095155
<b>25%</b>	0.154356	0.549375	0.151951	0.619129
<b>50%</b>	0.260902	0.712017	0.321670	0.851455
<b>75%</b>	0.462414	0.810290	0.525812	0.921667
<b>max</b>	0.757029	0.842829	0.734539	0.959299

In [ ]: `#Task - 04`  
`df.isnull()`

Out [ ]:

	Random value 1	Random value 2	Random value 3	Random value 4
<b>0</b>	False	False	False	False
<b>1</b>	False	False	False	False
<b>2</b>	False	False	False	False
<b>3</b>	False	False	False	False

In [ ]: `#Task - 04`  
`df.isnull().sum()`

Out [ ]: Random value 1    0  
Random value 2    0  
Random value 3    0  
Random value 4    0  
dtype: int64

In [ ]: `#Task - 04`  
`df.info()`

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 4 entries, 0 to 3
Data columns (total 4 columns):
#   Column          Non-Null Count  Dtype
---  -
0   Random value 1  4 non-null     float64
1   Random value 2  4 non-null     float64
2   Random value 3  4 non-null     float64
3   Random value 4  4 non-null     float64
dtypes: float64(4)
memory usage: 256.0 bytes
```

In [ ]: `#Task - 04`  
`df.dtypes`

```
Out[ ]: Random value 1    float64
Random value 2    float64
Random value 3    float64
Random value 4    float64
dtype: object
```

```
In [ ]: df
```

```
Out[ ]: Random value 1 Random value 2 Random value 3 Random value 4
```

	Random value 1	Random value 2	Random value 3	Random value 4
0	0.757029	0.323729	0.046493	0.793787
1	0.144639	0.624590	0.734539	0.095155
2	0.157595	0.842829	0.456237	0.909123
3	0.364209	0.799444	0.187103	0.959299

```
In [ ]: #Task - 05
df.loc[:, ['Random value 2', 'Random value 3']]
```

```
Out[ ]: Random value 2 Random value 3
```

	Random value 2	Random value 3
0	0.323729	0.046493
1	0.624590	0.734539
2	0.842829	0.456237
3	0.799444	0.187103

```
In [ ]: #Task - 05
df.iloc[:,1:3]
```

```
Out[ ]: Random value 2 Random value 3
```

	Random value 2	Random value 3
0	0.323729	0.046493
1	0.624590	0.734539
2	0.842829	0.456237
3	0.799444	0.187103

-----THE END-----

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