Task - 1 Create a pandas dataframe (DataFrame name as 'df') with numpy random values (4 features and 4 observation)

```
import pandas as pd
import numpy as np
df=pd.DataFrame(np.random.rand(4,4))
df
```

	0	1	2	3
0	0.417508	0.819264	0.815440	0.167644
1	0.349191	0.874713	0.683921	0.609312
2	0.366801	0.616885	0.035676	0.292509
3	0.921322	0.200592	0.470036	0.964615

Task - 2 Rename the task - 1 'df' dataframe column names to 'Random value 1', 'Random value 2', 'Random value 3' & 'Random value 4'

```
df.columns=['Random value 1','Random value 2','Random value 3','Random value 4']
df
```

	Random value 1	Random value 2	Random value 3	Random value 4
0	0.417508	0.819264	0.815440	0.167644
1	0.349191	0.874713	0.683921	0.609312
2	0.366801	0.616885	0.035676	0.292509
3	0.921322	0.200592	0.470036	0.964615

Task - 3 Find the descriptive statistics of the 'df' dataframe.

```
df.describe()
```

	Random value 1	Random value 2	Random value 3	Random value 4
count	4.000000	4.000000	4.000000	4.000000
mean	0.513705	0.627864	0.501268	0.508520
std	0.273283	0.305641	0.341476	0.356389
min	0.349191	0.200592	0.035676	0.167644
25%	0.362399	0.512812	0.361446	0.261293
50%	0.392155	0.718074	0.576979	0.450910
75%	0.543461	0.833126	0.716801	0.698138
max	0.921322	0.874713	0.815440	0.964615

Task - 4 Check for the null values in 'df' and find the data type of the columns.

```
#null values
df.isnull().sum()
```

```
Random value 1    0
Random value 2    0
Random value 3    0
Random value 4    0
dtype: int64
```

```
#data type
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
```

Task - 5 Display the 'Random value 2' & 'Random value 3' columns with location method and index location method.

```
#location method
df.loc[0:,"Random value 2":"Random value 3"]
```

	Random value 2	Random value 3
0	0.819264	0.815440
1	0.874713	0.683921
2	0.616885	0.035676
3	0.200592	0.470036

```
#index location method
df.iloc[0:,1:3]
```

	Random value 2	Random value 3
0	0.819264	0.815440
1	0.874713	0.683921
2	0.616885	0.035676
3	0.200592	0.470036

Double-click (or enter) to edit

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