


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

```
import pandas as pd
from numpy import random
x = random.randint(100, size=(4, 4))
df = pd.DataFrame(x)
df
```



	0	1	2	3
0	74	58	29	52
1	56	34	87	72
2	65	13	65	76
3	45	91	77	87

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

```
df.rename(columns = {0:"Random Value 1",1:"Random Value 2",2:"Random Value 3",3:"Random Value 4"},inplace = True)
df
```

	Random Value 1	Random Value 2	Random Value 3	Random Value 4
0	74	58	29	52
1	56	34	87	72
2	65	13	65	76
3	45	91	77	87

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	60.000000	49.000000	64.500000	71.750000
std	12.409674	33.496268	25.317978	14.614491
min	45.000000	13.000000	29.000000	52.000000
25%	53.250000	28.750000	56.000000	67.000000
50%	60.500000	46.000000	71.000000	74.000000
75%	67.250000	66.250000	79.500000	78.750000
max	74.000000	91.000000	87.000000	87.000000

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

```
df.isnull().any()
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     int64
1   Random Value 2  4 non-null     int64
2   Random Value 3  4 non-null     int64
3   Random Value 4  4 non-null     int64
dtypes: int64(4)
memory usage: 256.0 bytes
```

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

```
df.loc[0:3,"Random Value 2":"Random Value 3"]
```

	Random Value 2	Random Value 3
0	58	29
1	34	87
2	13	65

df.iloc[0:4,1:3]

	Random Value 2	Random Value 3
0	58	29
1	34	87
2	13	65
3	91	77