```
import pandas as pd
import numpy as np
'''
            Assignment-1
        AI and ML on pyhton
Name: Keshav Goyal
Reg no: 21BEC2297
'''
# Task 1
Row1=[]
Row2=[]
Row3=[]
Row4=[]
for i in range(4):
  Row1.append(np.random.randint(0,10))
  Row2.append(np.random.randint(0,10))
  Row3.append(np.random.randint(0,10))
  Row4.append(np.random.randint(0,10))
df=pd.DataFrame([Row1,Row2,Row3,Row4])
df
```

	0	1	2	3
0	8	8	8	0
1	3	5	4	6
2	6	8	0	7
3	6	4	0	9

```
# Task 2
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	8	8	8	0
1	3	5	4	6
2	6	8	0	7
3	6	4	0	9

```
# Task 3
df.describe() # Descriptive statistics
```

	Random value 1	Random value 2	Random value 3	Random value 4
count	4.000000	4.000000	4.000000	4.000000
mean	5.750000	6.250000	3.000000	5.500000
std	2.061553	2.061553	3.829708	3.872983
min	3.000000	4.000000	0.000000	0.000000
25%	5.250000	4.750000	0.000000	4.500000
50%	6.000000	6.500000	2.000000	6.500000
75%	6.500000	8.000000	5.000000	7.500000
max	8.000000	8.000000	8.000000	9.000000

```
# Task 4
df.isnull().any() # checking is there any null values in our dataset
```

```
Random value 1    False
Random value 2    False
Random value 3    False
Random value 4    False
dtype: bool
```

```
df.info() # Datatypes of columns
```

```
<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
df.loc[:, ['Random value 2','Random value 3']]
```

	Random value 2	Random value 3
0	8	8
1	5	4
2	8	0
3	4	0

```
df.iloc[:,1:3]
```

	Random value 2	Random value 3
0	8	8
1	5	4
2	8	0
3	4	0