Task-1

```
In [2]:
          import pandas as pd
          import numpy as np
          d1=pd.Series(np.random.rand(4))
          d2=pd.Series(np.random.rand(4))
          d3=pd.Series(np.random.rand(4))
          d4=pd.Series(np.random.rand(4))
In [3]:
          df = pd.DataFrame([d1,d2,d3,d4])
          df
Out[3]:
                                              3
         0 0.951232 0.510199 0.466709 0.525826
          1 \quad 0.553550 \quad 0.378724 \quad 0.003306 \quad 0.285775 \\
         2 0.643907 0.732335 0.453974 0.512890
         3 0.758305 0.118171 0.352106 0.083175
```

Task 2

```
In [6]:
          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
Out[6]:
          0
                   0.951232
                                  0.510199
                                                  0.466709
                                                                 0.525826
                   0.553550
                                  0.378724
                                                  0.003306
                                                                 0.285775
          2
                   0.643907
                                  0.732335
                                                  0.453974
                                                                 0.512890
          3
                                                  0.352106
                                                                 0.083175
                   0.758305
                                  0.118171
```

Task 3

```
In [7]:
           df.describe()
                  Random Value 1
                                  Random Value 2 Random Value 3 Random Value 4
Out[7]:
                                                                           4.000000
          count
                        4.000000
                                         4.000000
                                                          4.000000
                        0.726748
                                         0.434857
                                                          0.319024
                                                                           0.351916
           mean
                        0.171512
                                         0.256652
                                                          0.216637
                                                                           0.210359
             std
                        0.553550
                                                                           0.083175
            min
                                         0.118171
                                                          0.003306
            25%
                        0.621317
                                         0.313586
                                                          0.264906
                                                                           0.235125
            50%
                        0.701106
                                         0.444462
                                                          0.403040
                                                                           0.399332
            75%
                        0.806537
                                         0.565733
                                                          0.457158
                                                                           0.516124
                        0.951232
                                         0.732335
                                                          0.466709
                                                                           0.525826
            max
```

Task 4

```
In [11]:
         df['Random Value 1'].dtype
Out[11]: dtype('float64')
In [12]:
         df['Random Value 2'].dtype
Out[12]: dtype('float64')
In [13]:
         df['Random Value 3'].dtype
Out[13]: dtype('float64')
In [16]: df['Random Value 4'].dtype
Out[16]: dtype('float64')
        Task 5
In [18]:
         df.loc[0:,'Random Value 2']
Out[18]: 0
           0.510199
             0.378724
             0.732335
            0.118171
         3
         Name: Random Value 2, dtype: float64
In [19]:
         df.iloc[0:,2]
Out[19]: 0
            0.466709
             0.003306
             0.453974
            0.352106
         Name: Random Value 3, dtype: float64
```

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In []: