```
import pandas as pd
In [1]:
         df = pd.read_csv('IRIS.csv')
         df.columns = ['Sepal_length', 'Sepal_width', 'Petal_length', 'Petal_width', 'Special'
         summary_stats = df['Sepal_length'].groupby(df['Species']).describe()
In [2]:
         print(summary_stats)
                                                   min
                                                           25%
                                                                50%
                                                                     75%
                          count
                                   mean
                                              std
                                                                          max
         Species
         Iris-setosa
                           50.0
                                  5.006
                                         0.352490
                                                   4.3
                                                        4.800
                                                                5.0
                                                                     5.2
                                                                          5.8
         Iris-versicolor
                           50.0
                                  5.936
                                         0.516171
                                                   4.9
                                                        5.600
                                                                5.9
                                                                     6.3
                                                                          7.0
                           50.0
                                 6.588
                                         0.635880
                                                   4.9
                                                        6.225
                                                                6.5
                                                                     6.9
                                                                          7.9
         Iris-virginica
In [5]:
         import seaborn as sns
         iris df = sns.load dataset('iris')
         setosa_summary_stats = iris_df[iris_df.species == "setosa"].describe()
         versicolor_summary_stats = iris_df[iris_df.species == "versicolor"].describe()
         virginica_summary_stats = iris_df[iris_df.species == "virginica"].describe()
         print("Iris-setosa statistics:\n", setosa_summary_stats)
         print("Iris-versicolor statistics:\n", versicolor_summary_stats)
         print("Iris-virginica statistics:\n", virginica_summary_stats)
         Iris-setosa statistics:
                 sepal_length
                               sepal width
                                             petal length
                                                           petal width
                                                             50.000000
                    50.00000
                                50.000000
                                               50.000000
         count
        mean
                     5.00600
                                  3.428000
                                                1.462000
                                                              0.246000
         std
                     0.35249
                                  0.379064
                                                0.173664
                                                              0.105386
                     4.30000
                                  2.300000
                                                1.000000
                                                              0.100000
        min
         25%
                     4.80000
                                  3.200000
                                                1.400000
                                                              0.200000
         50%
                     5.00000
                                  3.400000
                                                1.500000
                                                              0.200000
         75%
                     5.20000
                                  3.675000
                                                1.575000
                                                              0.300000
                     5.80000
                                  4,400000
                                                1.900000
                                                              0.600000
        max
         Iris-versicolor statistics:
                                             petal_length
                 sepal_length sepal_width
                                                           petal_width
         count
                   50.000000
                                50.000000
                                               50.000000
                                                             50.000000
                    5.936000
                                  2.770000
                                                4.260000
                                                              1.326000
        mean
                    0.516171
                                 0.313798
                                                0.469911
                                                              0.197753
         std
                    4.900000
                                  2.000000
                                                3.000000
                                                              1.000000
        min
         25%
                    5.600000
                                  2.525000
                                                4.000000
                                                              1.200000
         50%
                    5.900000
                                  2.800000
                                                4.350000
                                                              1.300000
         75%
                    6.300000
                                  3.000000
                                                4.600000
                                                              1.500000
                    7,000000
                                  3,400000
                                                5.100000
                                                              1.800000
        max
         Iris-virginica statistics:
                                             petal length
                 sepal length
                               sepal width
                                                           petal width
                    50.00000
         count
                                50.000000
                                               50.000000
                                                              50.00000
        mean
                     6.58800
                                  2.974000
                                                5.552000
                                                               2.02600
         std
                     0.63588
                                  0.322497
                                                0.551895
                                                               0.27465
                     4.90000
                                  2.200000
                                                4.500000
                                                               1.40000
        min
         25%
                     6.22500
                                  2.800000
                                                5.100000
                                                               1.80000
         50%
                     6.50000
                                  3.000000
                                                5.550000
                                                               2.00000
         75%
                     6.90000
                                                               2.30000
                                  3.175000
                                                5.875000
                     7.90000
                                  3.800000
                                                6.900000
                                                               2.50000
        max
```