PROG 2(b)

AIM:

To read a CSV file and perform the following operations:

- -display the description of the file
- -display the file column wise
- -display the first five entries of the file
- -display the last five entries of the file
- -display the size of particular column

SOURCE:

Iris.csv

https://gist.githubusercontent.com/curran/a08a1080b88344b0c8a7/raw/0e7a9b0a5d22642a06d3d5b9bcbad9890c8ee534/iris.csv

SOURCE CODE:

```
import pandas as pd

df = pd.read_csv("./iris.csv")

print(f"discribing iris.csv\n{df.describe()}")

print(f"displaying coloumn 'sepal.length'\n{df['sepal.length']}")

print(f"first 5 entries are \n{df.head(5)}")

print(f"last 5 entries are \n{df.tail(5)}")

print(f"length of a particular column 'sepal.length' is len(df['sepal.length'])}")
```

OUTPUT:

```
PS D:\ML lab> python -u "d:\ML lab\lab2b.py"
discribing iris.csv
       sepal.length sepal.width petal.length petal.width
count
         150.000000
                      150.000000
                                    150.000000
                                                 150.000000
           5.843333
                        3.057333
mean
                                      3.758000
                                                   1.199333
std
           0.828066
                        0.435866
                                      1.765298
                                                   0.762238
                        2.000000
min
           4.300000
                                      1.000000
                                                   0.100000
25%
           5.100000
                        2.800000
                                      1.600000
                                                   0.300000
50%
           5.800000
                        3.000000
                                      4.350000
                                                   1.300000
75%
           6.400000
                        3.300000
                                      5.100000
                                                   1.800000
           7.900000
                        4.400000
                                      6.900000
                                                   2.500000
max
displaying coloumn 'sepal.length'
0
       5.1
       4.9
       4.7
3
       4.6
4
       5.0
145
       6.7
146
       6.3
147
       6.5
148
       6.2
149
       5.9
Name: sepal.length, Length: 150, dtype: float64
first 5 entries are
   sepal.length sepal.width petal.length petal.width variety
                         3.5
                                                    0.2 Setosa
0
            5.1
                                       1.4
            4.9
                         3.0
                                       1.4
                                                    0.2 Setosa
            4.7
                         3.2
                                       1.3
                                                    0.2 Setosa
            4.6
                         3.1
                                       1.5
                                                    0.2 Setosa
            5.0
                                                    0.2 Setosa
4
                         3.6
                                       1.4
last 5 entries are
     sepal.length sepal.width petal.length petal.width
                                                             variety
145
              6.7
                           3.0
                                         5.2
                                                      2.3 Virginica
146
              6.3
                           2.5
                                         5.0
                                                      1.9 Virginica
147
              6.5
                           3.0
                                         5.2
                                                      2.0 Virginica
148
              6.2
                           3.4
                                         5.4
                                                      2.3 Virginica
149
              5.9
                           3.0
                                         5.1
                                                      1.8 Virginica
length of a particular column 'sepal.length' is 150
```

RESULT:

Thus the program was executed and output was verified successfully.