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In [ ]: #CLEANING EMPTY CELLS
In [40]: #dropna() helps to clean empty cells by removing row #returns a new data frame wi
         import pandas as pd
         x= pd.read csv("E:\\Book1.csv")
         print(x.to_string())
         y=x.dropna()
                         #x.dropna(inplace = True) removes all rows with null values
         print(y.to string)
            S.No
                  Fruits
                            Price quantity
                   APPLE
                           $3.00
             1.0
                                        5.0
             2.0
                  Banana
                           $4.00
                                        9.0
         1
         2
             NaN
                  GRAPES
                              NaN
                                        NaN
         3
             4.0
                   GAUVA
                           $6.00
                                        6.0
             5.0
                   mango
                           $8.00
                                        8.0
         <bound method DataFrame.to string of</pre>
                                                  S.No Fruits
                                                                  Price quantity
                   APPLE
                           $3.00
                                        5.0
             1.0
         1
             2.0
                  Banana
                           $4.00
                                        9.0
         3
             4.0
                   GAUVA $6.00
                                        6.0
                   mango $8.00
             5.0
                                        8.0>
In [39]: #fillna() helps to replace empty cells with a value
         import pandas as pd
         x= pd.read csv("E:\\Book1.csv")
         print(x.to string())
         x.fillna("$5.00 ",inplace= True)
         print(x.to string)
            S.No
                  Fruits
                            Price quantity
         0
             1.0
                   APPLE $3.00
                                        5.0
         1
             2.0
                  Banana
                           $4.00
                                        9.0
         2
             NaN GRAPES
                                        NaN
                              NaN
         3
             4.0
                   GAUVA
                          $6.00
                                        6.0
                   mango $8.00
         4
             5.0
                                        8.0
         <bound method DataFrame.to_string of</pre>
                                                    S.No Fruits
                                                                    Price quantity
               1.0
                     APPLE $3.00
         0
                                         5.0
               2.0 BANANA $4.00
         1
                                         9.0
         2
            $5.00
                    GRAPES $5.00
                                      $5.00
         3
               4.0
                      GAUVA $6.00
                                         6.0
```

8.0>

4

5.0

mango \$8.00

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In [38]: #GIVING specific coloumn name helps to replace empty values for one column,
         import pandas as pd
         x= pd.read csv("E:\\Book1.csv")
         print(x.to string())
         x["Price"].fillna("$5.00 ", inplace= True)
         print(x.to_string)
             S.No
                  Fruits
                            Price quantity
              1.0
                    APPLE
                                        5.0
         0
                          $3.00
                  BANANA
                          $4.00
                                        9.0
         1
             2.0
         2
             NaN
                  GRAPES
                              NaN
                                        NaN
         3
             4.0
                    GAUVA
                           $6.00
                                        6.0
         4
              5.0
                    mango
                          $8.00
                                        8.0
         <bound method DataFrame.to string of</pre>
                                                   S.No Fruits
                                                                  Price quantity
                    APPLE
                           $3.00
                                        5.0
              1.0
         1
             2.0
                  Banana
                          $4.00
                                        9.0
         2
             NaN
                  GRAPES
                          $5.00
                                        NaN
         3
             4.0
                    GAUVA $6.00
                                        6.0
              5.0
                    mango $8.00
                                        8.0>
In [37]: |import pandas as pd
         x= pd.read csv("E:\\Book1.csv")
         print(x.to_string())
         x["Price"].fillna("$5.00 ", inplace= False)
         print(x.to string)
                  Fruits
             S.No
                            Price
                                   quantity
         0
             1.0
                   APPLE $3.00
                                        5.0
             2.0
                  BANANA
                           $4.00
                                        9.0
         1
         2
             NaN
                  GRAPES
                              NaN
                                        NaN
         3
             4.0
                    GAUVA
                           $6.00
                                        6.0
              5.0
                    mango
                           $8.00
                                        8.0
         <bound method DataFrame.to string of</pre>
                                                   S.No Fruits
                                                                  Price quantity
             1.0
                    APPLE
                           $3.00
                                        5.0
         0
         1
             2.0
                  BANANA
                           $4.00
                                        9.0
         2
             NaN
                  GRAPES
                              NaN
                                        NaN
                                        6.0
         3
             4.0
                    GAUVA
                           $6.00
              5.0
                                        8.0>
         4
                    mango
                           $8.00
```

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In [36]: # to replace empty cells we can use the mean() median() and mode() methods to cd
         import pandas as pd
         df=pd.read csv("E:\\Book1.csv")
         print(df.to string())
         x=df["quantity"].median()
         df["quantity"].fillna(x,inplace=True)
         print(df.to string)
         4
             S.No
                   Fruits
                            Price quantity
         0
              1.0
                    APPLE
                           $3.00
                                         5.0
                           $4.00
                                         9.0
         1
              2.0
                   Banana
         2
                   GRAPES
                                         NaN
              NaN
                              NaN
         3
              4.0
                    GAUVA
                           $6.00
                                         6.0
              5.0
                           $8.00
                                         8.0
         4
                    mango
          <bound method DataFrame.to string of</pre>
                                                   S.No Fruits
                                                                   Price quantity
              1.0
                    APPLE
                          $3.00
                                         5.0
         1
              2.0
                   BANANA
                           $4.00
                                         9.0
         2
              NaN
                   GRAPES
                              NaN
                                         7.0
         3
              4.0
                    GAUVA
                           $6.00
                                         6.0
         4
              5.0
                    mango
                           $8.00
                                         8.0>
         import pandas as pd
In [46]:
         df=pd.read_csv("E:\\Book1.csv")
         print(df.to string())
         x=df["quantity"].mode()[0]
         df["quantity"].fillna(x,inplace=True)
         print(df.to string)
             S.No
                   Fruits
                            Price
                                   quantity
         0
              1.0
                    APPLE
                           $3.00
                                         5.0
                                         9.0
         1
              2.0
                   BANANA
                           $4.00
         2
                   GRAPES
              NaN
                              NaN
                                         NaN
         3
              4.0
                    GAUVA
                           $6.00
                                         6.0
                           $8.00
         4
              5.0
                    mango
                                         8.0
          <bound method DataFrame.to_string of</pre>
                                                   S.No Fruits
                                                                   Price quantity
                    APPLE
              1.0
                           $3.00
                                         5.0
         1
              2.0
                   BANANA
                           $4.00
                                         9.0
         2
                   GRAPES
              NaN
                              NaN
                                         8.0
         3
              4.0
                    GAUVA
                           $6.00
                                         6.0
              5.0
                    mango
                           $8.00
                                         8.0>
```

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In [47]: import pandas as pd
         df=pd.read_csv("E:\\Book1.csv")
         print(df.to_string())
         x=df["S.No"].mode()[0]
         df["S.No"].fillna(x,inplace=True)
         print(df.to_string)
            S.No
                  Fruits
                            Price quantity
                   APPLE $3.00
         0
             1.0
                                        5.0
         1
             2.0
                  BANANA
                          $4.00
                                        9.0
         2
             NaN
                  GRAPES
                             NaN
                                        NaN
         3
             4.0
                   GAUVA
                          $6.00
                                        6.0
         4
             5.0
                   mango $8.00
                                        8.0
         <bound method DataFrame.to_string of</pre>
                                                  S.No Fruits
                                                                 Price quantity
             1.0
                   APPLE $3.00
                                        5.0
         1
             2.0
                 BANANA $4.00
                                        9.0
         2
             1.0
                  GRAPES
                             NaN
                                        NaN
             4.0
                   GAUVA
                          $6.00
                                        6.0
                   mango $8.00
             5.0
                                        8.0>
In [ ]:
```