```
import numpy as np
import pandas as pd
from google.colab import drive
drive.mount('/content/drive')
p1 = '/content/drive/MyDrive/Colab Notebooks/PONNURI ANIRUDDHA (RA2112704010015) - train.csv'
data = pd.read_csv(p1)

Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/colab notebooks/PONNURI forcibly forcibly remount, call drive.mount("/colab notebooks/PONNURI forcibly f
```

#To count the number of rows and columns of a DataFrame
print("Number of Rows:--",data.shape[0])
print("Number of Columns:--",data.shape[1])

Number of Rows:-- 891 Number of Columns:-- 12

#To display the descriptive statistics of a DataFrame.
data.info()

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 891 entries, 0 to 890
Data columns (total 12 columns):

| #  | Column      | Non-Null Count | Dtype   |  |  |  |
|--|-------------|----------------|---------|--|--|--|
|  |             |                |         |  |  |  |
| 0  | PassengerId | 891 non-null   | int64   |  |  |  |
| 1  | Survived    | 891 non-null   | int64   |  |  |  |
| 2  | Pclass      | 891 non-null   | int64   |  |  |  |
| 3  | Name        | 891 non-null   | object  |  |  |  |
| 4  | Sex         | 891 non-null   | object  |  |  |  |
| 5  | Age         | 714 non-null   | float64 |  |  |  |
| 6  | SibSp       | 891 non-null   | int64   |  |  |  |
| 7  | Parch       | 891 non-null   | int64   |  |  |  |
| 8  | Ticket      | 891 non-null   | object  |  |  |  |
| 9  | Fare        | 891 non-null   | float64 |  |  |  |
| 10   | Cabin       | 204 non-null   | object  |  |  |  |
| 11   | Embarked    | 889 non-null   | object  |  |  |  |
| <pre>dtypes: float64(2), int64(5), object(5)</pre> |             |                |         |  |  |  |
| memory usage: 83.7+ KB                             |             |                |         |  |  |  |

#To get the first 4 rows of a given DataFrame.
data.head(4)

|   | PassengerId | Survived | Pclass | Name                             | Sex  | Age  | SibSp | Parch | Ticket    | Fare   | Cab: |
|---|-------------|----------|--------|----------------------------------|------|------|-------|-------|-----------|--------|------|
| 0 | 1           | 0        | 3      | Braund,<br>Mr. Owen<br>Harris    | male | 22.0 | 1     | 0     | A/5 21171 | 7.2500 | Ne   |
|   |             |          |        | Cumings,<br>Mrs. John<br>Bradlev |      |      |       |       |           |        | _    |

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#To select the rows where the score is missing, i.e. is NaN.
print(data.isnull())

PassengerId Survived Pclass Name Sex SibSp Parch Ticket Age 0 False False False False False False False False False

```
1
          False
                            False False False False False
                    False
                                                                       False
2
          False
                                  False False False
                    False
                            False
                                                        False False
                                                                       False
3
          False
                    False
                                   False
                                          False
                                                False
                                                        False False
                            False
                                                                       False
4
          False
                            False False False
                                                        False False
                    False
                                                                       False
            . . .
                              . . .
                                     . . .
                                           . . .
                                                   . . .
                                                         . . .
                                                                . . .
                                                                         . . .
. .
                      . . .
          False
                    False
                            False
                                   False
                                          False False
                                                        False
                                                              False
886
                                                                       False
887
          False
                    False
                            False False False
                                                        False False
                                                                       False
                            False False False
888
          False
                    False
                                                 True
                                                        False
                                                              False
                                                                       False
889
          False
                    False
                            False
                                  False False False
                                                        False
                                                              False
                                                                       False
890
          False
                    False
                            False False False
                                                        False False
                                                                       False
     Fare Cabin
                  Embarked
0
     False
            True
                     False
1
    False False
                     False
2
    False
            True
                     False
3
    False False
                     False
    False
                     False
4
           True
      . . .
             . . .
                       . . .
            True
886
    False
                     False
887
    False False
                     False
888
    False
            True
                     False
889
    False False
                     False
890
                     False
    False
            True
```

[891 rows x 12 columns]

#Select the specified columns and rows from a given data frame. print(data.iloc[[1,2,3,4,5],[2,3,4,6,7,8]])

|   | Pclass | Name Sex  | SibSp | \ |
|---|--------|---|-------|---|
| 1 | 1      | Cumings, Mrs. John Bradley (Florence Briggs Th female | 1     |   |
| 2 | 3      | Heikkinen, Miss. Laina femalo                         | 9 0   |   |
| 3 | 1      | Futrelle, Mrs. Jacques Heath (Lily May Peel) female   | 1     |   |
| 4 | 3      | Allen, Mr. William Henry male                         | 9 0   |   |
| 5 | 3      | Moran, Mr. James male                                 | 9 0   |   |
|   |        |   |       |   |
|   | Parch  | Ticket  |       |   |
| 1 | 0      | PC 17599  |       |   |
| 2 | 0      | STON/02. 3101282                                      |       |   |
| 3 | 0      | 113803  |       |   |
| 4 | 0      | 373450  |       |   |
| 5 | 0      | 330877  |       |   |

✓ 0s completed at 11:45 AM