

Task 1 : Write a python program to import and export data using Pandas library functions. ¶

```
In [1]: ▶ import numpy as np
```

```
In [2]: ▶ import pandas as pd
```

```
In [6]: ▶ import sklearn as sl
```

```
In [7]: ▶ import matplotlib as mp
```

```
In [8]: ▶ import seaborn as sns
```

Importing Data from a csv file to Dataframe

```
In [15]: ▶ df=pd.read_csv("D:\\Sreejyothsna\\Machine Learning\\DataSets\\titanic.c
```

```
In [16]: df
```

Out[16]:

	Survived	Pclass	Name	Sex	Age	Siblings/Spouses Aboard	Parents/Children Aboard	F
0	0	3	Mr. Owen Harris Braund	male	22.0	1	0	7.25
1	1	1	Mrs. John Bradley (Florence Briggs Thayer) Cum...	female	38.0	1	0	71.28
2	1	3	Miss. Laina Heikkinen	female	26.0	0	0	7.92
3	1	1	Mrs. Jacques Heath (Lily May Peel) Futrelle	female	35.0	1	0	53.10
4	0	3	Mr. William Henry Allen	male	35.0	0	0	8.03
...
882	0	2	Rev. Juozas Montvila	male	27.0	0	0	13.00
883	1	1	Miss. Margaret Edith Graham	female	19.0	0	0	30.00
884	0	3	Miss. Catherine Helen Johnston	female	7.0	1	2	23.44
885	1	1	Mr. Karl Howell Behr	male	26.0	0	0	30.00
886	0	3	Mr. Patrick Dooley	male	32.0	0	0	7.73

887 rows × 8 columns

In [18]: `df.head`

```
Out[18]: <bound method NDFrame.head of      Survived  Pclass
Name \
0          0      3      Mr. Owen Harris Brau
nd
1          1      1  Mrs. John Bradley (Florence Briggs Thayer) Cu
m...
2          1      3      Miss. Laina Heikkin
en
3          1      1      Mrs. Jacques Heath (Lily May Peel) Futrel
le
4          0      3      Mr. William Henry All
en
..          ...      ...
...
882         0      2      Rev. Juozas Montvi
la
883         1      1      Miss. Margaret Edith Grah
am
884         0      3      Miss. Catherine Helen Johnst
on
885         1      1      Mr. Karl Howell Be
hr
886         0      3      Mr. Patrick Dool
ey

      Sex  Age  Siblings/Spouses Aboard  Parents/Children Aboard
Fare
0   male  22.0              1              0
7.2500
1  female  38.0              1              0  7
1.2833
2  female  26.0              0              0
7.9250
3  female  35.0              1              0  5
3.1000
4   male  35.0              0              0
8.0500
..      ...      ...              ...              ...
...
882  male  27.0              0              0  1
3.0000
883  female  19.0              0              0  3
0.0000
884  female   7.0              1              2  2
3.4500
885  male  26.0              0              0  3
0.0000
886  male  32.0              0              0
7.7500

[887 rows x 8 columns]>
```

In [19]: ▶ `df.head(20)`

Out[19]:

	Survived	Pclass	Name	Sex	Age	Siblings/Spouses Aboard	Parents/Children Aboard
0	0	3	Mr. Owen Harris Braund	male	22.0	1	0
1	1	1	Mrs. John Bradley (Florence Briggs Thayer) Cum...	female	38.0	1	0
2	1	3	Miss. Laina Heikkinen	female	26.0	0	0
3	1	1	Mrs. Jacques Heath (Lily May Peel) Futrelle	female	35.0	1	0
4	0	3	Mr. William Henry Allen	male	35.0	0	0
5	0	3	Mr. James Moran	male	27.0	0	0
6	0	1	Mr. Timothy J McCarthy	male	54.0	0	0
7	0	3	Master. Gosta Leonard Palsson	male	2.0	3	1
8	1	3	Mrs. Oscar W (Elisabeth Vilhelmina Berg) Johnson	female	27.0	0	2
9	1	2	Mrs. Nicholas (Adele Achem) Nasser	female	14.0	1	0
10	1	3	Miss. Marguerite Rut Sandstrom	female	4.0	1	1
11	1	1	Miss. Elizabeth Bonnell	female	58.0	0	0
12	0	3	Mr. William Henry Saunderscock	male	20.0	0	0
13	0	3	Mr. Anders Johan Andersson	male	39.0	1	5
14	0	3	Miss. Hulda Amanda Adolfina Vestrom	female	14.0	0	0
15	1	2	Mrs. (Mary D Kingcome) Hewlett	female	55.0	0	0
16	0	3	Master. Eugene Rice	male	2.0	4	1
17	1	2	Mr. Charles Eugene Williams	male	23.0	0	0
18	0	3	Mrs. Julius (Emelia Maria Vandemoortele) Vande...	female	31.0	1	0

	Survived	Pclass	Name	Sex	Age	Siblings/Spouses Aboard	Parents/Children Aboard
19	1	3	Mrs. Fatima Masselmani	female	22.0	0	0

In [20]:

df.tail(10)

Out[20]:

	Survived	Pclass	Name	Sex	Age	Siblings/Spouses Aboard	Parents/Children Aboard	Fare
877	0	3	Mr. Johann Markun	male	33.0	0	0	7.85
878	0	3	Miss. Gerda Ulrika Dahlberg	female	22.0	0	0	10.51
879	0	2	Mr. Frederick James Banfield	male	28.0	0	0	10.50
880	0	3	Mr. Henry Jr Sutehall	male	25.0	0	0	7.05
881	0	3	Mrs. William (Margaret Norton) Rice	female	39.0	0	5	29.12
882	0	2	Rev. Juozas Montvila	male	27.0	0	0	13.00
883	1	1	Miss. Margaret Edith Graham	female	19.0	0	0	30.00
884	0	3	Miss. Catherine Helen Johnston	female	7.0	1	2	23.45
885	1	1	Mr. Karl Howell Behr	male	26.0	0	0	30.00
886	0	3	Mr. Patrick Dooley	male	32.0	0	0	7.73



In [22]:

df.size

Out[22]: 7096

Export data to a csv file named result.csv

```
In [23]: marks = { "English" :[67,89,90,55],
  "Maths":[55,67,45,56],
  "IP":[66,78,89,90],
  "Chemistry" :[45,56,67,65],
  "Biology":[54,65,76,87]}
result = pd.DataFrame(marks,index=["Athang", "Sujata", "Sushil", "Sumedh"])
print("OUTPUT")
print("*****Marksheet*****")
print(result)
result.to_csv("result.csv")
df = pd.read_csv("result.csv")
print(df)
```

OUTPUT

*****Marksheet*****

	English	Maths	IP	Chemistry	Biology
Athang	67	55	66	45	54
Sujata	89	67	78	56	65
Sushil	90	45	89	67	76
Sumedh	55	56	90	65	87

Unnamed: 0	English	Maths	IP	Chemistry	Biology	
0	Athang	67	55	66	45	54
1	Sujata	89	67	78	56	65
2	Sushil	90	45	89	67	76
3	Sumedh	55	56	90	65	87

After running this you can check a csv file named "result.csv" will be created in the location where your programs are saved.

In []: