


```
import pandas as pd
from google.colab import files
uploaded=files.upload()
```

loan_data_set.csv

- **loan_data_set.csv**(application/vnd.ms-excel) - 38013 bytes, last modified: 10/11/2019 - 100% done
Saving loan_data_set.csv to loan_data_set.csv

```
import io
df2=pd.read_csv(io.BytesIO(uploaded['loan_data_set.csv']))
print(df2.shape)
df2
```

 (614, 13)

	Loan_ID	Gender	Married	Dependents	Education	Self_Employed	ApplicantIncome
0	LP001002	Male	No	0	Graduate	No	584
1	LP001003	Male	Yes	1	Graduate	No	458
2	LP001005	Male	Yes	0	Graduate	Yes	300
3	LP001006	Male	Yes	0	Not Graduate	No	258
4	LP001008	Male	No	0	Graduate	No	600
...
609	LP002978	Female	No	0	Graduate	No	290
610	LP002979	Male	Yes	3+	Graduate	No	410
611	LP002983	Male	Yes	1	Graduate	No	807
612	LP002984	Male	Yes	2	Graduate	No	758
613	LP002990	Female	No	0	Graduate	Yes	458

614 rows × 13 columns



```
print(df2.loc[:, 'ApplicantIncome'].mean())
print(df2.loc[:, 'CoapplicantIncome'].mean())
```

5102 150782287622

```
print(df2.loc[:, 'ApplicantIncome'].median())
print(df2.loc[:, 'CoapplicantIncome'].median())
```

3812.5
1188.5

```
gk=df2.groupby('Gender')
gk.first()
```

	Loan_ID	Married	Dependents	Education	Self_Employed	ApplicantIncome	CoapplicantIncome
Gender							
Female	LP001036	No	0	Graduate	No	3510	1188.5
Male	LP001002	No	0	Graduate	No	5849	3812.5



```
print(df2.loc[:, 'ApplicantIncome'].min())
print(df2.loc[:, 'CoapplicantIncome'].min())
```

150
0.0

```
print(df2.loc[:, 'ApplicantIncome'].max())
print(df2.loc[:, 'CoapplicantIncome'].max())
```

81000
41667.0

```
print(df2.loc[:, 'ApplicantIncome'].std())
print(df2.loc[:, 'CoapplicantIncome'].std())
```

```
6109.041673387174
2926.2483692241917
```

```
df2.describe()
```

	ApplicantIncome	CoapplicantIncome	LoanAmount	Loan_Amount_Term	Credit_Hist
count	614.000000	614.000000	592.000000	600.000000	564.000
mean	5403.459283	1621.245798	146.412162	342.000000	0.842
std	6109.041673	2926.248369	85.587325	65.12041	0.364
min	150.000000	0.000000	9.000000	12.000000	0.000
25%	2877.500000	0.000000	100.000000	360.000000	1.000
50%	3812.500000	1188.500000	128.000000	360.000000	1.000
75%	5795.000000	2297.250000	168.000000	360.000000	1.000
max	81000.000000	41667.000000	700.000000	480.000000	1.000

```
gk.get_group('Male')
```

	Loan_ID	Gender	Married	Dependents	Education	Self_Employed	ApplicantIncome
0	LP001002	Male	No	0	Graduate	No	584

1	LP001003	Male	Yes	1	Graduate	No	458
3	LP001006	Male	Yes	0	Graduate	No	258

```
df2.groupby(df2["Gender"]).ApplicantIncome.agg(["min", "max", "mean", "median", "std"])
```

	min	max	mean	median	std	
Gender						
Female	210	19484	4643.473214	3583.0	3585.381488	
Male	150	81000	5446.460123	3865.0	6185.789262	

611	LP002983	Male	Yes	1	Graduate	No	807
612	LP002984	Male	Yes	2	Graduate	No	758

489 rows × 13 columns

