

CSV

```
In [1]: import pandas as pd
a={"a":[1,2,3,4],"b":[11,12,13,14],"c":[10,20,30,40]}
b=pd.DataFrame(a)
print(b)
b.to_csv("pooja.csv") #convert dataframe in b into a CSV file.
b.to_csv("pooja1.csv",index=False) #default row num will be vanished.
b.to_csv("pooja2.csv",index=False,header=["P","Q","R"]) #column name will be renamed.
```

```
   a  b  c
0  1 11 10
1  2 12 20
2  3 13 30
3  4 14 40
```

read csv

```
In [2]: csv1=pd.read_csv("C:\\Users\\Asus\\Downloads\\IPL.csv")
csv1
```

	id	city	team1	team2	toss_winner	toss_decision	winner	win_by_runs	win_by_wickets
0	1	Hyderabad	Sunrisers Hyderabad	Royal Challengers Bangalore	Royal Challengers Bangalore	field	Sunrisers Hyderabad	35	0
1	2	Pune	Mumbai Indians	Rising Pune Supergiant	Rising Pune Supergiant	field	Rising Pune Supergiant	0	7
2	3	Rajkot	Gujarat Lions	Kolkata Knight Riders	Kolkata Knight Riders	field	Kolkata Knight Riders	0	10
3	4	Indore	Rising Pune Supergiant	Kings XI Punjab	Kings XI Punjab	field	Kings XI Punjab	0	6
4	5	Bangalore	Royal Challengers Bangalore	Delhi Daredevils	Royal Challengers Bangalore	bat	Royal Challengers Bangalore	15	0
5	6	Hyderabad	Gujarat Lions	Sunrisers Hyderabad	Sunrisers Hyderabad	field	Sunrisers Hyderabad	0	9
6	7	Mumbai	Kolkata Knight Riders	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4
7	8	Indore	Royal Challengers Bangalore	Kings XI Punjab	Royal Challengers Bangalore	bat	Kings XI Punjab	0	8
8	9	Pune	Delhi Daredevils	Rising Pune Supergiant	Rising Pune Supergiant	field	Delhi Daredevils	97	0
9	10	Mumbai	Sunrisers Hyderabad	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4

```
In [3]: csv2=pd.read_csv("C:\\Users\\Asus\\Downloads\\IPL.csv",nrows=3)
#to get rows
csv2
#print(type(csv2))
```

	id	city	team1	team2	toss_winner	toss_decision	winner	win_by_runs	win_by_wickets
0	1	Hyderabad	Sunrisers Hyderabad	Royal Challengers Bangalore	Royal Challengers Bangalore	field	Sunrisers Hyderabad	35	0
1	2	Pune	Mumbai Indians	Rising Pune Supergiant	Rising Pune Supergiant	field	Rising Pune Supergiant	0	7
2	3	Rajkot	Gujarat Lions	Kolkata Knight Riders	Kolkata Knight Riders	field	Kolkata Knight Riders	0	10

```
In [4]: csv3=pd.read_csv("C:\\Users\\Asus\\Downloads\\IPL.csv",usecols=["toss_decision","toss_winner"])
#to get columns
csv3
```

Out[4]:

	toss_winner	toss_decision
0	Royal Challengers Bangalore	field
1	Rising Pune Supergiant	field
2	Kolkata Knight Riders	field
3	Kings XI Punjab	field
4	Royal Challengers Bangalore	bat
5	Sunrisers Hyderabad	field
6	Mumbai Indians	field
7	Royal Challengers Bangalore	bat
8	Rising Pune Supergiant	field
9	Mumbai Indians	field

```
In [5]: csv4=pd.read_csv("C:\\Users\\Asus\\Downloads\\IPL.csv",usecols=[6,7]) #to get columns by index
csv4
```

Out[5]:

	winner	win_by_runs
0	Sunrisers Hyderabad	35
1	Rising Pune Supergiant	0
2	Kolkata Knight Riders	0
3	Kings XI Punjab	0
4	Royal Challengers Bangalore	15
5	Sunrisers Hyderabad	0
6	Mumbai Indians	0
7	Kings XI Punjab	0
8	Delhi Daredevils	97
9	Mumbai Indians	0

```
In [6]: csv5=pd.read_csv("C:\\Users\\Asus\\Downloads\\IPL.csv",skiprows=[3,4]) #to skip rows
csv5
```

Out[6]:

	id	city	team1	team2	toss_winner	toss_decision	winner	win_by_runs	win_by_wickets
0	1	Hyderabad	Sunrisers Hyderabad	Royal Challengers Bangalore	Royal Challengers Bangalore	field	Sunrisers Hyderabad	35	0
1	2	Pune	Mumbai Indians	Rising Pune Supergiant	Rising Pune Supergiant	field	Rising Pune Supergiant	0	7
2	5	Bangalore	Royal Challengers Bangalore	Delhi Daredevils	Royal Challengers Bangalore	bat	Royal Challengers Bangalore	15	0
3	6	Hyderabad	Gujarat Lions	Sunrisers Hyderabad	Sunrisers Hyderabad	field	Sunrisers Hyderabad	0	9
4	7	Mumbai	Kolkata Knight Riders	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4
5	8	Indore	Royal Challengers Bangalore	Kings XI Punjab	Royal Challengers Bangalore	bat	Kings XI Punjab	0	8
6	9	Pune	Delhi Daredevils	Rising Pune Supergiant	Rising Pune Supergiant	field	Delhi Daredevils	97	0
7	10	Mumbai	Sunrisers Hyderabad	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4

```
In [7]: csv6=pd.read_csv("C:\\Users\\Asus\\Downloads\\IPL.csv",index_col=["city"]) #to make a column as index column.
csv6
```

Out[7]:

		id	team1	team2	toss_winner	toss_decision	winner	win_by_runs	win_by_wickets
	city								
	Hyderabad	1	Sunrisers Hyderabad	Royal Challengers Bangalore	Royal Challengers Bangalore	field	Sunrisers Hyderabad	35	0
	Pune	2	Mumbai Indians	Rising Pune Supergiant	Rising Pune Supergiant	field	Rising Pune Supergiant	0	7
	Rajkot	3	Gujarat Lions	Kolkata Knight Riders	Kolkata Knight Riders	field	Kolkata Knight Riders	0	10
	Indore	4	Rising Pune Supergiant	Kings XI Punjab	Kings XI Punjab	field	Kings XI Punjab	0	6
	Bangalore	5	Royal Challengers Bangalore	Delhi Daredevils	Royal Challengers Bangalore	bat	Royal Challengers Bangalore	15	0
	Hyderabad	6	Gujarat Lions	Sunrisers Hyderabad	Sunrisers Hyderabad	field	Sunrisers Hyderabad	0	9
	Mumbai	7	Kolkata Knight Riders	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4
	Indore	8	Royal Challengers Bangalore	Kings XI Punjab	Royal Challengers Bangalore	bat	Kings XI Punjab	0	8
	Pune	9	Delhi Daredevils	Rising Pune Supergiant	Rising Pune Supergiant	field	Delhi Daredevils	97	0
	Mumbai	10	Sunrisers Hyderabad	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4

In [8]:

```
csv7=pd.read_csv("C:\\Users\\Asus\\Downloads\\IPL.csv",header=2) #to make a perticular row's values as columns
csv7
```

Out[8]:

	2	Pune	Mumbai Indians	Rising Pune Supergiant	Rising Pune Supergiant.1	field	Rising Pune Supergiant.2	0	7
0	3	Rajkot	Gujarat Lions	Kolkata Knight Riders	Kolkata Knight Riders	field	Kolkata Knight Riders	0	10
1	4	Indore	Rising Pune Supergiant	Kings XI Punjab	Kings XI Punjab	field	Kings XI Punjab	0	6
2	5	Bangalore	Royal Challengers Bangalore	Delhi Daredevils	Royal Challengers Bangalore	bat	Royal Challengers Bangalore	15	0
3	6	Hyderabad	Gujarat Lions	Sunrisers Hyderabad	Sunrisers Hyderabad	field	Sunrisers Hyderabad	0	9
4	7	Mumbai	Kolkata Knight Riders	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4
5	8	Indore	Royal Challengers Bangalore	Kings XI Punjab	Royal Challengers Bangalore	bat	Kings XI Punjab	0	8
6	9	Pune	Delhi Daredevils	Rising Pune Supergiant	Rising Pune Supergiant	field	Delhi Daredevils	97	0
7	10	Mumbai	Sunrisers Hyderabad	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4

In [9]:

```
csv7=pd.read_csv("C:\\Users\\Asus\\Downloads\\IPL.csv",names=["p1","p2","p3"]) #to put a header above column
csv7
```

Out[9]:

						p1	p2	p3
id	city	team1	team2	toss_winner	toss_decision	winner	win_by_runs	win_by_wickets
1	Hyderabad	Sunrisers Hyderabad	Royal Challengers Bangalore	Royal Challengers Bangalore	field	Sunrisers Hyderabad	35	0
2	Pune	Mumbai Indians	Rising Pune Supergiant	Rising Pune Supergiant	field	Rising Pune Supergiant	0	7
3	Rajkot	Gujarat Lions	Kolkata Knight Riders	Kolkata Knight Riders	field	Kolkata Knight Riders	0	10
4	Indore	Rising Pune Supergiant	Kings XI Punjab	Kings XI Punjab	field	Kings XI Punjab	0	6
5	Bangalore	Royal Challengers Bangalore	Delhi Daredevils	Royal Challengers Bangalore	bat	Royal Challengers Bangalore	15	0
6	Hyderabad	Gujarat Lions	Sunrisers Hyderabad	Sunrisers Hyderabad	field	Sunrisers Hyderabad	0	9
7	Mumbai	Kolkata Knight Riders	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4
8	Indore	Royal Challengers Bangalore	Kings XI Punjab	Royal Challengers Bangalore	bat	Kings XI Punjab	0	8
9	Pune	Delhi Daredevils	Rising Pune Supergiant	Rising Pune Supergiant	field	Delhi Daredevils	97	0
10	Mumbai	Sunrisers Hyderabad	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4

In [10]: `csv7=pd.read_csv("C:\\Users\\Asus\\Downloads\\IPL.csv", dtype={"win_by_runs":"float"}) #to make int into float values`
`csv7`

Out[10]:

	id	city	team1	team2	toss_winner	toss_decision	winner	win_by_runs	win_by_wickets
0	1	Hyderabad	Sunrisers Hyderabad	Royal Challengers Bangalore	Royal Challengers Bangalore	field	Sunrisers Hyderabad	35.0	0
1	2	Pune	Mumbai Indians	Rising Pune Supergiant	Rising Pune Supergiant	field	Rising Pune Supergiant	0.0	7
2	3	Rajkot	Gujarat Lions	Kolkata Knight Riders	Kolkata Knight Riders	field	Kolkata Knight Riders	0.0	10
3	4	Indore	Rising Pune Supergiant	Kings XI Punjab	Kings XI Punjab	field	Kings XI Punjab	0.0	6
4	5	Bangalore	Royal Challengers Bangalore	Delhi Daredevils	Royal Challengers Bangalore	bat	Royal Challengers Bangalore	15.0	0
5	6	Hyderabad	Gujarat Lions	Sunrisers Hyderabad	Sunrisers Hyderabad	field	Sunrisers Hyderabad	0.0	9
6	7	Mumbai	Kolkata Knight Riders	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0.0	4
7	8	Indore	Royal Challengers Bangalore	Kings XI Punjab	Royal Challengers Bangalore	bat	Kings XI Punjab	0.0	8
8	9	Pune	Delhi Daredevils	Rising Pune Supergiant	Rising Pune Supergiant	field	Delhi Daredevils	97.0	0
9	10	Mumbai	Sunrisers Hyderabad	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0.0	4

In [11]: `csv7=pd.read_csv("C:\\Users\\Asus\\Downloads\\IPL.csv", header=None)`
`#delete column name in original file first then column name will become 0 1 2 3 ..`
`csv7`

Out[11]:

	0	1	2	3	4	5	6	7	8	
	0	id	city	team1	team2	toss_winner	toss_decision	winner	win_by_runs	win_by_wickets
1	1	Hyderabad		Sunrisers Hyderabad	Royal Challengers Bangalore	Royal Challengers Bangalore	field	Sunrisers Hyderabad	35	0
2	2	Pune		Mumbai Indians	Rising Pune Supergiant	Rising Pune Supergiant	field	Rising Pune Supergiant	0	7
3	3	Rajkot		Gujarat Lions	Kolkata Knight Riders	Kolkata Knight Riders	field	Kolkata Knight Riders	0	10
4	4	Indore		Rising Pune Supergiant	Kings XI Punjab	Kings XI Punjab	field	Kings XI Punjab	0	6
5	5	Bangalore		Royal Challengers Bangalore	Delhi Daredevils	Royal Challengers Bangalore	bat	Royal Challengers Bangalore	15	0
6	6	Hyderabad		Gujarat Lions	Sunrisers Hyderabad	Sunrisers Hyderabad	field	Sunrisers Hyderabad	0	9
7	7	Mumbai		Kolkata Knight Riders	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4
8	8	Indore		Royal Challengers Bangalore	Kings XI Punjab	Royal Challengers Bangalore	bat	Kings XI Punjab	0	8
9	9	Pune		Delhi Daredevils	Rising Pune Supergiant	Rising Pune Supergiant	field	Delhi Daredevils	97	0
10	10	Mumbai		Sunrisers Hyderabad	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4

In [12]:

```
csv7=pd.read_csv("C:\\Users\\Asus\\Downloads\\IPL.csv", header=None,prefix="P")
#delete column name in original file first then column name will become P0,P1,... ..
csv7

C:\Users\Asus\AppData\Local\Temp\ipykernel_16092\166963627.py:1: FutureWarning: The prefix argument has been deprecated and will be removed in a future version. Use a list comprehension on the column names in the future.

csv7=pd.read_csv("C:\\Users\\Asus\\Downloads\\IPL.csv", header=None,prefix="P")
```

Out[12]:

	P0	P1	P2	P3	P4	P5	P6	P7	P8
0	id	city	team1	team2	toss_winner	toss_decision	winner	win_by_runs	win_by_wickets
1	1	Hyderabad	Sunrisers Hyderabad	Royal Challengers Bangalore	Royal Challengers Bangalore	field	Sunrisers Hyderabad	35	0
2	2	Pune	Mumbai Indians	Rising Pune Supergiant	Rising Pune Supergiant	field	Rising Pune Supergiant	0	7
3	3	Rajkot	Gujarat Lions	Kolkata Knight Riders	Kolkata Knight Riders	field	Kolkata Knight Riders	0	10
4	4	Indore	Rising Pune Supergiant	Kings XI Punjab	Kings XI Punjab	field	Kings XI Punjab	0	6
5	5	Bangalore	Royal Challengers Bangalore	Delhi Daredevils	Royal Challengers Bangalore	bat	Royal Challengers Bangalore	15	0
6	6	Hyderabad	Gujarat Lions	Sunrisers Hyderabad	Sunrisers Hyderabad	field	Sunrisers Hyderabad	0	9
7	7	Mumbai	Kolkata Knight Riders	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4
8	8	Indore	Royal Challengers Bangalore	Kings XI Punjab	Royal Challengers Bangalore	bat	Kings XI Punjab	0	8
9	9	Pune	Delhi Daredevils	Rising Pune Supergiant	Rising Pune Supergiant	field	Delhi Daredevils	97	0
10	10	Mumbai	Sunrisers Hyderabad	Mumbai Indians	Mumbai Indians	field	Mumbai Indians	0	4