

## Read & Write CSV File

```
In [16]: import numpy as np
import pandas as pd
```

```
In [6]: content = pd.read_csv('titanic.csv', sep= ':')
content
```

Out[6]:

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
0	1	0	3	Braund, Mr. Owen Harris	male	22	1	0	151601	53.1	5	S
1	2	1	1	Cumings, Mrs. John Bradley (Florence ...	female	38	1	0	9147	51.0	14	C
2	3	1	3	Heikkinen, Miss. Laina	female	26	0	0	17462	31.0	0	S
3	4	1	1	Futrelle, Mrs. Jacques Heath (Lily Ma...	female	35	1	0	151602	53.0	5	C
4	5	0	3	Allen, Mr. William Henry	male	35	0	0	151603	53.0	5	S
5	6	0	3	Moran, Mr. James	male	30	0	0	330871	21.0	0	Q
6	7	0	1	McCarthy, Mr. Timothy J	male	54	0	0	151604	53.0	5	S
7	8	0	3	Palsson, Master. Gosta Leonard	male	2	0	0	151605	53.0	5	S
8	9	1	3	Johnson, Mrs. Oscar W (Elisabeth Vilh...	female	41	0	0	151606	53.0	5	S
9	10	1	2	Nasser, Mrs. Nicholas (Adele Achem)\...	female	51	0	0	151607	53.0	5	S
10	11	1	3	Sandstrom, Miss. Marguerite Rut	female	58	0	0	151608	53.0	5	S
11	12	1	1	Bonnell, Miss. Elizabeth	female	58	0	0	151609	53.0	5	S
12	13	0	3	Saunderscock, Mr. William Henry	male	30	0	0	151610	53.0	5	S
13	14	0	3	Andersson, Mr. Anders Johan	male	39	0	0	151611	53.0	5	S
14	15	0	3	Vestrom, Miss. Hulda Amanda Adolfina	female	14	0	0	151612	53.0	5	S

PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
...											
126											
127											
128											
129											
130											
131											
132											
133											
134											

PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
135								136\t0\t2\tRichard, Mr. Emile\tmale\t23\t0\t0\t...			
136								137\t1\t1\tNewsom, Miss. Helen Monypeny\tfemal...			
137								138\t0\t1\tFutrelle, Mr. Jacques Heath\tmale\t...			
138								139\t0\t3\tOsen, Mr. Olaf Elon\tmale\t16\t0\t0\t...			
139								140\t0\t1\tGiglio, Mr. Victor\tmale\t24\t0\t0\t...			
140								141\t0\t3\tBoulos, Mrs. Joseph (Sultana)\tfema...			
141								142\t1\t3\tNysten, Miss. Anna Sofia\tfemale\t2...			
142								143\t1\t3\tHakkarainen, Mrs. Pekka Pietari (El...			
143								144\t0\t3\tBurke, Mr. Jeremiah\tmale\t19\t0\t0\t...			
144								145\t0\t2\tAndrew, Mr. Edgardo Samuel\tmale\t1...			
145								146\t0\t2\tNicholls, Mr. Joseph Charles\tmale\t...			
146								147\t1\t3\tAndersson, Mr. August Edvard ("Wenn...			
147								148\t0\t3\tFord, Miss. Robina Maggie "Ruby"\tf...			
148								149\t0\t2\tNavratil, Mr. Michel ("Louis M Hoff...			
149								150\t0\t2\tByles, Rev. Thomas Roussel Davids\t...			
150								151\t0\t2\tBateman, Rev. Robert James\tmale\t5...			
151								152\t1\t1\tPears, Mrs. Thomas (Edith Wearne)\t...			
152								153\t0\t3\tMeo, Mr. Alfonzo\tmale\t55.5\t0\t0\t...			
153								154\t0\t3\tvan Billiard, Mr. Austin Blyler\tma...			
154								155\t0\t3\tOlsen, Mr. Ole Martin\tmale\t0\t0\t0\t...			
155								156\t0\t1\tWilliams, Mr. Charles Duane\tmale\t...			

156 rows × 11 columns

In [5]: type (content)

Out[5]: pandas.core.frame.DataFrame

```
In [9]: content.head()
```

```
Out[9]:
```

	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
0				1\t0\t3\tBraund, Mr. Owen Harris\tmale\t22\t1\...								
1				2\t1\t1\tCumings, Mrs. John Bradley (Florence ...								
2				3\t1\t3\tHeikkinen, Miss. Laina\tfemale\t26\t0\...								
3				4\t1\t1\tFutrelle, Mrs. Jacques Heath (Lily Ma...								
4				5\t0\t3\tAllen, Mr. William Henry\tmale\t35\t0\...								

```
In [12]: content.to_csv('new.csv', index=True)
```

```
In [5]: df= pd.read_csv("DataFile/balance-sheets.csv")
df
```

```
Out[5]:
```

	Year	Institutional_sector_name	Institutional_sector_code	Descriptor	SNA08TRANS	As
0	2008.03	Corporate business enterprises	141	Capital Account Opening balances Produced non-...	LS00000	
1	2009.03	Corporate business enterprises	141	Capital Account Opening balances Produced non-...	LS00000	
2	2010.03	Corporate business enterprises	141	Capital Account Opening balances Produced non-...	LS00000	

	Year	Institutional_sector_name	Institutional_sector_code	Descriptor	SNA08TRANS	As
3	2011.03	Corporate business enterprises	141	Capital Account Opening balances Produced non-...	LS000000	
4	2012.03	Corporate business enterprises	141	Capital Account Opening balances Produced non-...	LS000000	
5	2013.03	Corporate business enterprises	141	Capital Account Opening balances Produced non-...	LS000000	
6	2014.03	Corporate business enterprises	141	Capital Account Opening balances Produced non-...	LS000000	
7	2015.03	Corporate business enterprises	141	Capital Account Opening balances Produced non-...	LS000000	
8	2016.03	Corporate business enterprises	141	Capital Account Opening balances Produced non-...	LS000000	

	Year	Institutional_sector_name	Institutional_sector_code	Descriptor	SNA08TRANS	As
9	2017.03	Corporate business enterprises	141	Capital Account Opening balances Produced non-...	LS00000	
10	2008.03	Corporate business enterprises	141	Capital Account Opening balances Non-produced ...	LS00000	
11	2009.03	Corporate business enterprises	141	Capital Account Opening balances Non-produced ...	LS00000	
12	2010.03	Corporate business enterprises	141	Capital Account Opening balances Non-produced ...	LS00000	
13	2011.03	Corporate business enterprises	141	Capital Account Opening balances Non-produced ...	LS00000	
14	2012.03	Corporate business enterprises	141	Capital Account Opening balances Non-produced ...	LS00000	

	Year	Institutional_sector_name	Institutional_sector_code	Descriptor	SNA08TRANS	As
15	2013.03	Corporate business enterprises	141	Capital Account Opening balances Non-produced ...	LS00000	
16	2014.03	Corporate business enterprises	141	Capital Account Opening balances Non-produced ...	LS00000	
17	2015.03	Corporate business enterprises	141	Capital Account Opening balances Non-produced ...	LS00000	
18	2016.03	Corporate business enterprises	141	Capital Account Opening balances Non-produced ...	LS00000	
19	2017.03	Corporate business enterprises	141	Capital Account Opening balances Non-produced ...	LS00000	
20	2008.03	Corporate business enterprises	141	Capital Account Opening balances Total non-fin...	LS00000	

	Year	Institutional_sector_name	Institutional_sector_code	Descriptor	SNA08TRANS	As
<b>21</b>	2009.03	Corporate business enterprises	141	Capital Account Opening balances Total non-fin...	LS000000	
<b>22</b>	2010.03	Corporate business enterprises	141	Capital Account Opening balances Total non-fin...	LS000000	
<b>23</b>	2011.03	Corporate business enterprises	141	Capital Account Opening balances Total non-fin...	LS000000	
<b>24</b>	2012.03	Corporate business enterprises	141	Capital Account Opening balances Total non-fin...	LS000000	
<b>25</b>	2013.03	Corporate business enterprises	141	Capital Account Opening balances Total non-fin...	LS000000	
<b>26</b>	2014.03	Corporate business enterprises	141	Capital Account Opening balances Total non-fin...	LS000000	



	Year	Institutional_sector_name	Institutional_sector_code	Descriptor	SNA08TRANS	As
<b>27</b>	2015.03	Corporate business enterprises	141	Capital Account Opening balances Total non-fin...	LS00000	
<b>28</b>	2016.03	Corporate business enterprises	141	Capital Account Opening balances Total non-fin...	LS00000	
<b>29</b>	2017.03	Corporate business enterprises	141	Capital Account Opening balances Total non-fin...	LS00000	
...	...	...	...	...	...	...
<b>18690</b>	2008.03	Pension funds	261	Financial liabilities Closing balance financia...	LE00000	
<b>18691</b>	2009.03	Pension funds	261	Financial liabilities Closing balance financia...	LE00000	
<b>18692</b>	2010.03	Pension funds	261	Financial liabilities Closing balance financia...	LE00000	
<b>18693</b>	2011.03	Pension funds	261	Financial liabilities Closing balance financia...	LE00000	

	Year	Institutional_sector_name	Institutional_sector_code	Descriptor	SNA08TRANS	As
<b>18694</b>	2012.03	Pension funds	261	Financial liabilities Closing balance financia...	LE00000	
<b>18695</b>	2013.03	Pension funds	261	Financial liabilities Closing balance financia...	LE00000	
<b>18696</b>	2014.03	Pension funds	261	Financial liabilities Closing balance financia...	LE00000	
<b>18697</b>	2015.03	Pension funds	261	Financial liabilities Closing balance financia...	LE00000	
<b>18698</b>	2016.03	Pension funds	261	Financial liabilities Closing balance financia...	LE00000	
<b>18699</b>	2017.03	Pension funds	261	Financial liabilities Closing balance financia...	LE00000	
<b>18700</b>	2008.03	Pension funds	261	Financial liabilities Closing balance other ac...	LE00000	

	Year	Institutional_sector_name	Institutional_sector_code	Descriptor	SNA08TRANS	As
<b>18701</b>	2009.03	Pension funds	261	Financial liabilities Closing balance other ac...	LE00000	
<b>18702</b>	2010.03	Pension funds	261	Financial liabilities Closing balance other ac...	LE00000	
<b>18703</b>	2011.03	Pension funds	261	Financial liabilities Closing balance other ac...	LE00000	
<b>18704</b>	2012.03	Pension funds	261	Financial liabilities Closing balance other ac...	LE00000	
<b>18705</b>	2013.03	Pension funds	261	Financial liabilities Closing balance other ac...	LE00000	
<b>18706</b>	2014.03	Pension funds	261	Financial liabilities Closing balance other ac...	LE00000	
<b>18707</b>	2015.03	Pension funds	261	Financial liabilities Closing balance other ac...	LE00000	

	Year	Institutional_sector_name	Institutional_sector_code	Descriptor	SNA08TRANS	As
<b>18708</b>	2016.03	Pension funds	261	Financial liabilities Closing balance other ac...	LE00000	
<b>18709</b>	2017.03	Pension funds	261	Financial liabilities Closing balance other ac...	LE00000	
<b>18710</b>	2008.03	Pension funds	261	Financial liabilities Closing balance Total fi...	LE00000	
<b>18711</b>	2009.03	Pension funds	261	Financial liabilities Closing balance Total fi...	LE00000	
<b>18712</b>	2010.03	Pension funds	261	Financial liabilities Closing balance Total fi...	LE00000	
<b>18713</b>	2011.03	Pension funds	261	Financial liabilities Closing balance Total fi...	LE00000	
<b>18714</b>	2012.03	Pension funds	261	Financial liabilities Closing balance Total fi...	LE00000	

	Year	Institutional_sector_name	Institutional_sector_code	Descriptor	SNA08TRANS	As
18715	2013.03	Pension funds	261	Financial liabilities Closing balance Total fi...	LE00000	
18716	2014.03	Pension funds	261	Financial liabilities Closing balance Total fi...	LE00000	
18717	2015.03	Pension funds	261	Financial liabilities Closing balance Total fi...	LE00000	
18718	2016.03	Pension funds	261	Financial liabilities Closing balance Total fi...	LE00000	
18719	2017.03	Pension funds	261	Financial liabilities Closing balance Total fi...	LE00000	

18720 rows × 8 columns



## Read & Write Excel File

```
In [6]: import pandas as pd

def convert_Name_cell (cell):
    if cell== "NaN":
        return 'No Data'
    return cell
```

```
df = pd.read_excel("DataFile/Groups Contact List.xlsx", "Sheet1", nrows=48, converters={'Name': convert_Name_cell})
```

df

Out[6]:

	Name	Email	Floor Number	Group Number	Phone No.	
0	Syed Mohammad Moinul Islam Robin	moinul.i.robin@gmail.com	18.0	1.0	1.670201e+09	Professor Mi
1	Nusrat Jahan Kanta	nusrat.kanta123@gmail.com	18.0	1.0	1.679508e+09	michael.s.wang.386
2	Syumaiya Tasmim Nuha	nuha.khan4@gmail.com	18.0	1.0	1.682159e+09	Skype ID: z
3	Tahira Bishwas Anny	tahiraanny@gmail.com	18.0	2.0	1.684483e+09	
4	Sayera Aznabi	aznabisayera888@gmail.com	18.0	2.0	1.686382e+09	
5	Md. Sanaullah Novel	sun.cse93@gmail.com	18.0	2.0	1.673962e+09	
6	Md. Raihan-Al-Masud	raihan.emasud@gmail.com	18.0	3.0	1.670269e+09	
7	Syed Nayeem Ridwan	nsu.snr@gmail.com	18.0	3.0	1.672798e+09	
8	Md. Aminur Rahman	aminrahman20@gmail.com	18.0	3.0	1.793518e+09	
9	Hisham I Ahmed	hishamazahmed@gmail.com	18.0	4.0	1.717955e+09	

	Name	Email	Floor Number	Group Number	Phone No.	S
10	AZM Ariful Haque Real	a.aquereal@northsouth.edu	18.0	4.0	1.911228e+09	
11	Md. Sadid Tahsin	tamim.tm@gmail.com	18.0	4.0	1.717924e+09	
12	Md. Hasan Mahmud	rumman3000@gmail.com	18.0	5.0	1.935899e+09	
13	Md. Eleus Ali	eleus.apon@gmail.com	18.0	5.0	1.681932e+09	
14	Md. Shiddiqur Rahman	sumonqb@gmail.com	18.0	5.0	1.761014e+09	
15	Avijit Nandi	avijitnandineu@gmail.com	18.0	6.0	1.737880e+09	
16	Mohammad Mohiuddin	mohiuddin.bapparaj@gmail.com	18.0	6.0	1.670241e+09	
17	Md. Asif Shahjalal	asif.cuet93@gmail.com	18.0	6.0	NaN	
18	Robiul Hossain Shah	imran2t11@gmail.com	18.0	7.0	1.917490e+09	
19	Md. Sarzil Mehrab	sarzil.pust@gmail.com	18.0	7.0	1.728655e+09	
20	Md. Sayedur Rahman	sayedurcse20@gmail.com	18.0	7.0	1.686382e+09	
21	Zafrin Malek Mithila	zmmithila@gmail.com	18.0	8.0	1.676339e+09	
22	Tahmid Chowdhury	tahmidchowdhury85@yahoo.com	18.0	8.0	1.681174e+09	
23	Rashed Bishal	rashed.bishal@gmail.com	18.0	8.0	1.520103e+09	

	Name	Email	Floor Number	Group Number	Phone No.	\$
24	Md. Raju Ahmed	engrraju36@gmail.com	18.0	9.0	1.721587e+09	
25	Md. Mahmudun Nabi	pallobeee49@gmail.com	18.0	9.0	1.670641e+09	
26	Md. Saiful Islam	bpmdsaiful@gmail.com	18.0	9.0	1.671036e+09	
27	Rajwana Sultana	rejurajwana17@gmail.com	18.0	10.0	1.813739e+09	
28	Md. Rakibul Hasan	aporbo.hasan@gmail.com	18.0	10.0	1.516176e+09	
29	Tanjia Rahman Priya	tanjiapriyae12@gmail.com	18.0	10.0	1.775572e+09	
30	Ratul	karigor93@gmail.com	18.0	11.0	1.670733e+09	
31	Ishrak Ahmed	ishrak.ahmed2@gmail.com	18.0	11.0	1.674756e+09	
32	Sadia Sharmin	sadiasharminliza@gmail.com	18.0	11.0	1.685069e+09	
33	A. F. M. Sanjan Rahman	sazid243@gmail.com	18.0	12.0	1.677756e+09	
34	Zahidul Alam Emon	emon.mailme@gmail.com	18.0	12.0	1.624647e+09	
35	Rakibul Islam	rakibulroyal@gmail.com	18.0	12.0	1.673259e+09	
36	Mirja Wakil	bipumirja@gmail.com	18.0	13.0	1.913891e+09	
37	Soura Sarker	sourasarker1@gmail.com	18.0	13.0	1.670479e+09	
38	Rayhan Ahmed	mail.rayhanahmed@gmail.com	18.0	13.0	1.832339e+09	



	Name	Email	Floor Number	Group Number	Phone No.	\$
39	Md.Robiul Alom	prothomrobi1@gmail.com	18.0	14.0	1.671069e+09	
40	Morshed Khan	morshed2767@gmail.com	18.0	14.0	1.521101e+09	
41	Md. Jobaer	jobaer.fenibd@gmail.com	18.0	14.0	1.515205e+09	
42	Shakil Sultan sunmoon	ssakilsultan74@gmail.com	18.0	15.0	1.918275e+09	
43	Syed Abdulla noman	sa.noman75@gmail.com	18.0	15.0	1.733182e+09	
44	Charls Dickens Tusha Falia	tushaFalia@gmail.com	18.0	15.0	1.919826e+09	
45	NaN	NaN	NaN	NaN	NaN	
46	NaN	NaN	NaN	NaN	NaN	
47	NaN	NaN	NaN	NaN	NaN	

In [7]: `#Write.xlsx`

```
df.to_excel('new.xlsx', sheet_name = "stocks")
```

## Write an individual DataFrame in Excel:

```
In [8]: df_booking = pd.DataFrame({
    'Teckers': ['Novel', 'Nadem', 'Niloy', 'Nabila'],
    'Price': ['285', '195', '80', '50'],
    'Place': ['Dh', 'Br', 'Ch', 'Sy'],
    'eps': ['26.7', '11.2', '38.0', '2.12']
})
```

```
df_weather = pd.DataFrame({
    'Day': ['Sat', 'Sun', 'Mon', 'Fri'],
    'Temperature': ['26.C', '32.C', '28.C', '25.C'],
    'Event': ['Rain', 'Hot', 'Normal', 'Cloudy']
})
```

```
In [9]: with pd.ExcelWriter ('booking_weather.xlsx') as writer:
        df_booking.to_excel(writer, sheet_name= "booking")
        df_weather.to_excel(writer, sheet_name= "weather")
```

```
In [ ]:
```