

## Basic Pandas Functions Part - 3

```
In [1]: import pandas as pd
```

```
In [2]: import numpy as np
```

### Reading a Csv File using pandas

```
In [3]: csv_read = pd.read_csv('DATA.csv')
```

```
In [4]: csv_read
```

	SYMBOL	SERIES	DATE1	PREV_CLOSE	OPEN_PRICE	HIGH_PRICE	LOW_PRICE	LAST_PRICE	CLOSE_PRICE	AVG_PRICE	TTL_TRD_QNT
0	20MICRONS	EQ	13-Jan-2022	83.05	83.50	91.35	82.70	91.35	91.35	88.32	1378
1	21STCENMGM	EQ	13-Jan-2022	47.85	48.30	48.30	46.90	47	46.90	47.16	23
2	3IINFOLTD	EQ	13-Jan-2022	86.90	87.65	89.00	87.55	88.4	88.25	88.15	1198
3	3MINDIA	EQ	13-Jan-2022	25189.30	25319.00	25319.00	24751.10	25236.05	25267.60	25001.70	3
4	3PLAND	BE	13-Jan-2022	25.05	26.25	26.30	25.10	26.25	26.15	26.04	66
...	...	...	...	...	...	...	...	...	...	...	...
2158	ZOMATO	EQ	13-Jan-2022	132.25	132.50	133.45	132.35	133.1	133.10	132.93	6535
2159	ZOTA	EQ	13-Jan-2022	381.15	376.00	385.00	372.20	375.6	374.80	378.61	24
2160	ZUARI	EQ	13-Jan-2022	124.75	126.40	127.00	123.00	124.2	124.30	124.68	75
2161	ZUARIGLOB	EQ	13-Jan-2022	155.15	155.20	159.80	152.30	155.5	154.75	157.33	216
2162	ZYDUSWELL	EQ	13-Jan-2022	1867.10	1884.00	1884.00	1860.05	1861.1	1861.90	1864.81	45

2163 rows × 15 columns

```
In [5]: csv_read.head()
```

	SYMBOL	SERIES	DATE1	PREV_CLOSE	OPEN_PRICE	HIGH_PRICE	LOW_PRICE	LAST_PRICE	CLOSE_PRICE	AVG_PRICE	TTL_TRD_QNT
0	20MICRONS	EQ	13-Jan-2022	83.05	83.50	91.35	82.70	91.35	91.35	88.32	1378325
1	21STCENMGM	EQ	13-Jan-2022	47.85	48.30	48.30	46.90	47	46.90	47.16	23394
2	3IINFOLTD	EQ	13-Jan-2022	86.90	87.65	89.00	87.55	88.4	88.25	88.15	1198599
3	3MINDIA	EQ	13-Jan-2022	25189.30	25319.00	25319.00	24751.10	25236.05	25267.60	25001.70	3078
4	3PLAND	BE	13-Jan-2022	25.05	26.25	26.30	25.10	26.25	26.15	26.04	66606

### Getting the Datatype of a Column

```
In [6]: print(csv_read['SYMBOL'].dtype)
```

object

```
In [7]: print(csv_read['PREV_CLOSE'].dtype)
```

float64

### Exporting a Dataframe as CSV

```
In [8]: export_df = pd.DataFrame([[1,2,3,4],[12,45,32,78],[123,546,456,123],[1000,2565,1241,3251]])
```

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

	0	1	2	3
0	1	2	3	4
1	12	45	32	78
2	123	546	456	123
3	1000	2565	1241	3251

```
In [10]: export_df.to_csv('exported_df.csv')
```

### Exporting a CSV with no Index

```
In [11]: export_df.to_csv('no_index_df.csv', index=False)
```

### Merging 2 Dataframes

```
In [12]: df_1 = pd.DataFrame([[4,5,3],[2,1,5],[9,3,4],[5,3,9]], columns=['A','B','C'])
```

```
In [13]: df_2 = pd.DataFrame([[2,4,3],[5,2,1],[8,2,4],[5,3,1]], columns=['X','Y','Z'])
```

```
In [14]: df_1
```

```
Out[14]: A B C
```

```
0 4 5 3
```

```
1 2 1 5
```

```
2 9 3 4
```

```
3 5 3 9
```

```
In [15]: df_2
```

```
Out[15]: X Y Z
```

```
0 2 4 3
```

```
1 5 2 1
```

```
2 8 2 4
```

```
3 5 3 1
```

```
In [22]: pd.merge(df_1, df_2, right_on='Y', left_on='B')
```

```
Out[22]: A B C X Y Z
```

```
0 9 3 4 5 3 1
```

```
1 5 3 9 5 3 1
```

## End