

Import Data CSV and Excel

`df = pd.read_csv('filename.csv')` Read CSV into a Pandas DataFrame

`df = pd.to_csv('filename.csv')` Export Pandas DataFrame to CSV

`df = pd.read_excel('filename.xlsx', sheet_name="Sheet 1")` Read Excel into a Pandas DataFrame

`df = pd.to_excel('filename.xlsx', sheet_name="Sheet 1")` Export Pandas DataFrame to Excel

Import Options:

`header=False, Index=False, usecols=(5,6)`

Can also read CSV / HTML / JSON

Initial look into the DataFrame

`df.head(5)` Reads the first 5 rows

`df.tail(5)` Reads the last 5 rows

`df.shape()` Gives the number of columns and rows in the DataFrame

`df.dtypes` Gives the datatypes for all the columns

`df['ColumnName'].dtypes` Gives the datatypes for a single column

`df.head(-5)` can retrieve last 5 lines similar to `list[-5]` retrieves the 5th last.

Change Column Data Type

`df['col'] = df['col'].str.rstrip('%').astype('float') / 100.0` Remove % sign, convert to float and divide by 100

`df['col'] = df['col'].str[:-1].astype('float') / 100.0` Blindly removing the last char - goes to the last character

`df['Column1'] = df['Column1'].astype(float)` Change 'Column1' to float

Re-Order Columns

`df = df[['Column3', 'Column2', 'Column1']]` Re-orders the columns to the order specified in this list

Dealing with NAN values

`df = df.fillna(method='f-fill')` Fills blank values using forward fill method

`df = df.fillna(method='b-fill')` Fills blank values using backwards fill method

`df.dropna(inplace=True)` Removes rows with no values

Forward filling means fill missing values with last cell with value in the column. Backward filling means fill missing values with next cell with value.

Padding Values With Zero's

`df['Column1'] = df['Column1'].astype(str).str.zfill(6)` Sets the number to six (6) long, which adds zeros

Obviously uses string since 0009 cannot be a valid number.

Filter Column

`df2 = df[(df['Column1'] >= some_number)]` Filter DataFrame by certain value and putting it in another df.

`df2 = df[(df["Name"]=="Tom") & (df["Age"]==42)]` Filter DataFrame by multiple value and putting it in another df.

