Exploratory Data Analysis			
	Importing Data		
Function	Description		
pd.read_csv(file_name)	Read from a csv file		
pd.read_csv(file_name, sep='\t')	Read from a csv file separated by tabs		
pd.read_excel(file_name)	Read from excel file		
pd.read_table(file_name)	Read from a delimited text file		
pd.read_sql(sql_query, connection_object)	Read from a database		
pd.read_json("string, url or file")	Read from a json string, url or a file		
pd.read_html(URL)	Read from a url or a file		
	Data Exploration		
Function	Description		
df.info()	Provides information like datatype, shape of the dataset and memory usage		
df.describe()	Provides information like count, mean, min, max, standard deviation and quantiles		
df.shape	Returns the shape of the dataset		
df.head()	Prints top 5 rows of the dataset		
df.tail()	Prints last 5 rows of the dataset		
df.column_name.value_counts()	Returns count of the unique classes in a column		
df.count()	Returns total number of observations in each column		
df.column_name.unique()	Returns unique classes in the column		
Filter data			
Function	Description		
df.loc[condition]	Returns the rows based on one condition		
df[(condition) & (condition)]	Returns the rows based on two conditions (& operator)		
df[(condition) (condition)]	Returns the rows based on two conditions (& operator)		
7	Returns the rows based on two conditions († operator) Returns the rows based on two conditions (& operator) using loc		
df.loc[(condition) & (condition)]	` ' ' · '		
df.loc[(condition) (condition)]	Returns the rows based on two conditions (operator) using loc		
	Renaming Columns and Indices		
Function	Description		
df.columns = ['Column 1', 'Column 2',]	Rename the columns by passing a list		
<pre>df.columns = ['Column 1', 'Column 2',] df.rename(columns={'old_name': 'new_name'})</pre>	Rename the columns by passing a list Rename the columns using rename function		
<pre>df.columns = ['Column 1', 'Column 2',] df.rename(columns={'old_name': 'new_name'}) df.rename(index={'old_name': 'new_name'})</pre>	Rename the columns by passing a list Rename the columns using rename function Rename the indices using rename function		
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Function

df.duplicated(keep='first')

df.drop_duplicates(keep, inplace)

Null Value Analysis and Data Cleaning	
Function	Description
df.isnull()	Returns True where the value is null
df.isnull().sum()	Returns the count of null values in each column
df.isnull().sum().sum()	Returns the count of all the null values from a dataframe
df.notnull()	Returns True where the value is not null
df.dropna(axis, thresh)	Drops the columns (axis=1) or rows (axis=0) having null values based on threshold
df.fillna(value)	Fills the cells having null values with the passed value
df.replace('old_value', 'new_value')	Replace a value by a new value
df.replace([old_1, old_2], [new_1, new_2])	Replace multiple values with multiple new values
df.column_name.astype('data_type')	Change the data type of the column
	Selecting rows and columns
Function	Description
df.column name	Select the column using. Note: a column having white spaces cannot be selected by this method
df["column_name"]	Select a column
df[["column_name_1", "column_name_2",]]	Select multiple columns
df.iloc[:,:]	Pass the row and column start and end indices to extract selected rows and columns
df.iloc[index_position]	Pass the index position to extract rows
df.loc[index_value]	Pass the index value to extract rows
Write Data	
	Write Data
Function	Write Data Description
Function df.to_csv(file_name)	
	Description
df.to_csv(file_name)	Description Write the data from df to a csv file
df.to_csv(file_name) df.to_excel(file_name)	Description Write the data from df to a csv file Write the data from df to an excel file
df.to_csv(file_name) df.to_excel(file_name) df.to_html(file_name)	Description Write the data from df to a csv file Write the data from df to an excel file Write the data from df to a html file

Duplicates

Find the first occuring duplicates.

Drop the duplicate rows

Description