Pandas

**Glossary**

Below is the summary of all the functions and methods that you learned in this lesson:

**Category: Initialization and Utility**

| **Function/Method** | **Description** |
| --- | --- |
| [pandas.read\_csv(relative\_path\_to\_file)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.read_csv.html?highlight=read_csv) | Reads a comma-separated values (csv) file present at relative\_path\_to\_file and loads it as a DataFrame |
| [pandas.DataFrame(data)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.html#pandas.DataFrame) | Returns a 2-D heterogeneous tabular data. Note: There are other optional arguments as well that you can use to create a dataframe. |
| [pandas.Series(data, index)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.Series.html#pandas.Series) | Returns 1-D ndarray with axis labels |
| pandas.Series.shape pandas.DataFrame.shape | Returns a tuple representing the dimensions |
| pandas.Series.ndim pandas.DataFrame.ndim | Returns the number of the dimensions (rank). It will return 1 in case of a Series |
| pandas.Series.size pandas.DataFrame.size | Returns the number of elements |
| pandas.Series.values | Returns the data available in the Series |
| pandas.Series.index | Returns the indexes available in the Series |
| [pandas.DataFrame.isnull()](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.isnull.html#pandas.DataFrame.isnull) | Returns a same sized object having True for NaN elements and False otherwise. |
| [pandas.DataFrame.count(axis)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.count.html#pandas.DataFrame.count) | Returns the count of non-NaN values along the given axis. If axis=0, it will count down the dataframe, meaning column-wise count of non-NaN values. |
| [pandas.DataFrame.head([n])](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.head.html#pandas.DataFrame.head) | Return the first *n* rows from the dataframe. By default, n=5. |
| [pandas.DataFrame.tail([n])](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.tail.html#pandas.DataFrame.tail) | Return the last *n* rows from the dataframe. By default, n=5. Supports negative indexing as well. |
| [pandas.DataFrame.describe()](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.describe.html#pandas.DataFrame.describe) | Generate the descriptive statistics, such as, count, mean, std deviation, min, and max. |
| [pandas.DataFrame.min()](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.min.html#pandas.DataFrame.min) | Returns the minimum of the values along the given axis. |
| [pandas.DataFrame.max()](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.max.html#pandas.DataFrame.max) | Returns the maximum of the values along the given axis. |
| [pandas.DataFrame. mean()](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.mean.html#pandas.DataFrame.mean) | Returns the mean of the values along the given axis. |
| [pandas.DataFrame.corr()](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.corr.html#pandas.DataFrame.corr) | Compute pairwise correlation of columns, excluding NA/null values. |
| [pandas.DataFrame.rolling(windows)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.rolling.html?highlight=dataframe%20rolling#pandas.DataFrame.rolling) | Provide rolling window calculation, such as pandas.DataFrame.rolling(15).mean() for rolling mean over window size of 15. |
| [pandas.DataFrame.loc[label]](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.loc.html#pandas.DataFrame.loc) | Access a group of rows and columns by label(s) |
| [pandas.DataFrame.groupby(mapping\_function)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.groupby.html#pandas.DataFrame.groupby) | Groups the dataframe using a given mapper function or or by a Series of columns. |

**Category: Manipulation**

| **Function/Method** | **Description** |
| --- | --- |
| [pandas.Series.drop(index)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.Series.drop.html#pandas.Series.drop) | Drops the element positioned at the given index(es) |
| [pandas.DataFrame.drop(labels)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.drop.html#pandas.DataFrame.drop) | Drop specified labels (entire columns or rows) from the dataframe. |
| [pandas.DataFrame.pop(item)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.pop.html#pandas.DataFrame.pop) | Return the item and drop it from the frame. If not found, then raise a KeyError. |
| [pandas.DataFrame.insert(location, column, values)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.insert.html#pandas.DataFrame.insert) | Insert column having given values into DataFrame at specified location. |
| [pandas.DataFrame.rename(dictionary-like)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.rename.html#pandas.DataFrame.rename) | Rename label(s) (columns or row-indexes) as mentioned in the dictionary-like |
| [pandas.DataFrame.set\_index(keys)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.set_index.html#pandas.DataFrame.set_index) | Set the DataFrame's row-indexes using existing column-values. |
| [pandas.DataFrame.dropna(axis)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.dropna.html#pandas.DataFrame.dropna) | Remove rows (if axis=0) or columns (if axis=1) that contain missing values. |
| [pandas.DataFrame.fillna(value, method, axis)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.fillna.html#pandas.DataFrame.fillna) | Replace NaN values with the specified value along the given axis, and using the given method (‘backfill’, ‘bfill’, ‘pad’, ‘ffill’, None) |
| [pandas.DataFrame.interpolate(method, axis)](https://pandas.pydata.org/pandas-docs/stable/reference/api/pandas.DataFrame.interpolate.html#pandas.DataFrame.interpolate) | Replace the NaN values with the estimated value calculated using the given method along the given axis. |