Input/output

Pickling

- read_pickle (filepath_or_buffer[, ...]) Load pickled pandas object (or any object) from file.
- DataFrame.to_pickle (path, *[, compression, ...]) Pickle (serialize) object to file.

Flat file

- read_table (filepath_or_buffer, *[, sep, ...]) Read general delimited file into DataFrame.
- read_csv (filepath_or_buffer, *[, sep, ...]) Read a commaseparated values (csv) file into DataFrame.
- DataFrame.to_csv ([path_or_buf, sep, na_rep, ...]) Write object to a comma-separated values (csv) file.
- read_fwf (filepath_or_buffer, *[, colspecs, ...]) Read a table of fixed-width formatted lines into DataFrame.

Clipboard

- read_clipboard ([sep, dtype_backend]) Read text from clipboard and pass to read_csv() .
- DataFrame.to_clipboard (*[, excel, sep]) Copy object to the system clipboard.

Excel

- read_excel (io[, sheet_name, header, names, ...]) Read an Excel file into a pandas DataFrame .
- DataFrame.to_excel (excel_writer, *[, ...]) Write object to an Excel sheet.
- ExcelFile (path_or_buffer[, engine, ...]) Class for parsing tabular Excel sheets into DataFrame objects.
- ExcelFile.book -
- ExcelFile.sheet names -
- ExcelFile.parse ([sheet_name, header, names, ...]) Parse specified sheet(s) into a DataFrame.
- Styler.to_excel (excel_writer[, sheet_name, ...]) Write Styler to an Excel sheet.
- ExcelWriter (path[, engine, date_format, ...]) Class for writing DataFrame objects into excel sheets.

JSON

- read_json (path_or_buf, *[, orient, typ, ...]) Convert a JSON string to pandas object.
- json_normalize (data[, record_path, meta, ...]) Normalize semi-structured JSON data into a flat table.
- DataFrame.to_json ([path_or_buf, orient, ...]) Convert the object to a JSON string.
- build_table_schema (data[, index, ...]) Create a Table schema from data .

HTML

- read_html (io, *[, match, flavor, header, ...]) Read HTML tables into a list of DataFrame objects.
- DataFrame.to_html ([buf, columns, col_space, ...]) Render a DataFrame as an HTML table.
- Styler.to_html ([buf, table_uuid, ...]) Write Styler to a file, buffer or string in HTML-CSS format.

XML

- read_xml (path_or_buffer, *[, xpath, ...]) Read XML document into a DataFrame object.
- DataFrame.to_xml ([path_or_buffer, index, ...]) Render a DataFrame to an XML document.

Latex

- DataFrame.to_latex ([buf, columns, header, ...]) Render object to a LaTeX tabular, longtable, or nested table.
- Styler.to_latex ([buf, column_format, ...]) Write Styler to a file, buffer or string in LaTeX format.

HDFStore: PyTables (HDF5)

- read_hdf (path_or_buf[, key, mode, errors, ...]) Read from the store, close it if we opened it.
- HDFStore.put (key, value[, format, index, ...]) Store object in HDFStore.
- HDFStore.append (key, value[, format, axes, ...]) Append to Table in file.
- HDFStore.get (key) Retrieve pandas object stored in file.

- HDFStore.select (key[, where, start, stop, ...]) Retrieve pandas object stored in file, optionally based on where criteria.
- HDFStore.info () Print detailed information on the store.
- HDFStore.keys ([include]) Return a list of keys corresponding to objects stored in HDFStore.
- **HDFStore.groups** () Return a list of all the top-level nodes.
- **HDFStore.walk ([where])** Walk the pytables group hierarchy for pandas objects.

Feather

- read_feather (path[, columns, use_threads, ...]) Load a feather-format object from the file path.
- DataFrame.to_feather (path, **kwargs) Write a DataFrame to the binary Feather format.

Parquet

- read_parquet (path[, engine, columns, ...]) Load a parquet object from the file path, returning a DataFrame.
- DataFrame.to_parquet ([path, engine, ...]) Write a DataFrame to the binary parquet format.

ORC

- read_orc (path[, columns, dtype_backend, ...]) Load an ORC object from the file path, returning a DataFrame.
- DataFrame.to_orc ([path, engine, index, ...]) Write a DataFrame to the ORC format.

SAS

• read_sas (filepath_or_buffer, *[, format, ...]) - Read SAS files stored as either XPORT or SAS7BDAT format files.

SPSS

• read_spss (path[, usecols, ...]) - Load an SPSS file from the file path, returning a DataFrame.

SQL

- read_sql_table (table_name, con[, schema, ...]) Read SQL database table into a DataFrame.
- read_sql_query (sql, con[, index_col, ...]) Read SQL query into a DataFrame.
- read_sql (sql, con[, index_col, ...]) Read SQL query or database table into a DataFrame.
- DataFrame.to_sql (name, con, *[, schema, ...]) Write records stored in a DataFrame to a SQL database.

Google BigQuery

• read_gbq (query[, project_id, index_col, ...]) - (DEPRECATED) Load data from Google BigQuery.

STATA

- read_stata (filepath_or_buffer, *[, ...]) Read Stata file into DataFrame.
- DataFrame.to_stata (path, *[, convert_dates, ...]) Export DataFrame object to Stata dta format.
- StataReader.data_label Return data label of Stata file.
- StataReader.value_labels () Return a nested dict associating each variable name to its value and label.
- StataReader.variable_labels () Return a dict associating each variable name with corresponding label.
- StataWriter.write_file () Export DataFrame object to Stata dta format.

General functions

Data manipulations

- melt (frame[, id_vars, value_vars, var_name, ...]) Unpivot a DataFrame from wide to long format, optionally leaving identifiers set.
- pivot (data, *, columns[, index, values]) Return reshaped DataFrame organized by given index / column values.
- pivot_table (data[, values, index, columns, ...]) Create a spreadsheet-style pivot table as a DataFrame.
- crosstab (index, columns[, values, rownames, ...]) Compute a simple cross tabulation of two (or more) factors.
- cut (x, bins[, right, labels, retbins, ...]) Bin values into discrete intervals.
- qcut (x, q[, labels, retbins, precision, ...]) Quantilebased discretization function.

- merge (left, right[, how, on, left_on, ...]) Merge DataFrame or named Series objects with a database-style join.
- merge_ordered (left, right[, on, left_on, ...]) Perform a merge for ordered data with optional filling/interpolation.
- merge_asof (left, right[, on, left_on, ...]) Perform a merge by key distance.
- concat (objs, *[, axis, join, ignore_index, ...]) Concatenate pandas objects along a particular axis.
- get_dummies (data[, prefix, prefix_sep, ...]) Convert categorical variable into dummy/indicator variables.
- from_dummies (data[, sep, default_category]) Create a categorical DataFrame from a DataFrame of dummy variables
- categorical DataFrame from a DataFrame of dummy variables.
 factorize (values[, sort, use_na_sentinel, ...]) Encode the object as an enumerated type or categorical variable.
- unique (values) Return unique values based on a hash table.
- lreshape (data, groups[, dropna]) Reshape wide-format data
 to long.
- wide_to_long (df, stubnames, i, j[, sep, suffix]) Unpivot a DataFrame from wide to long format.

Top-level missing data

- isna (obj) Detect missing values for an array-like object.
- isnull (obj) Detect missing values for an array-like object.
- notna (obj) Detect non-missing values for an array-like object.
- notnull (obj) Detect non-missing values for an array-like object.

Top-level dealing with numeric data

• to_numeric (arg[, errors, downcast, ...]) - Convert argument to a numeric type.

Top-level dealing with datetimelike data

- to_datetime (arg[, errors, dayfirst, ...]) Convert argument to datetime.
- to_timedelta (arg[, unit, errors]) Convert argument to timedelta.
- date_range ([start, end, periods, freq, tz, ...]) Return a fixed frequency DatetimeIndex.
- bdate_range ([start, end, periods, freq, tz, ...]) Return a fixed frequency DatetimeIndex with business day as the default.
- period_range ([start, end, periods, freq, name]) Return a fixed frequency PeriodIndex.

- timedelta_range ([start, end, periods, freq, ...]) Return a fixed frequency TimedeltaIndex with day as the default.
- infer_freq (index) Infer the most likely frequency given
 the input index.

Top-level dealing with Interval data

• interval_range ([start, end, periods, freq, ...]) - Return a fixed frequency IntervalIndex.

Top-level evaluation

• eval (expr[, parser, engine, local_dict, ...]) - Evaluate a Python expression as a string using various backends.

Datetime formats

• tseries.api.guess_datetime_format (dt_str[, ...]) - Guess the datetime format of a given datetime string.

Hashing

- util.hash_array (vals[, encoding, hash_key, ...]) Given a 1d array, return an array of deterministic integers.
- util.hash_pandas_object (obj[, index, ...]) Return a data hash of the Index/Series/DataFrame.

Importing from other DataFrame libraries

• api.interchange.from_dataframe (df[, allow_copy]) - Build a pd.DataFrame from any DataFrame supporting the interchange protocol.

Series

Constructor

• Series ([data, index, dtype, name, copy, ...]) - Onedimensional ndarray with axis labels (including time series).

Attributes

• Series.index - The index (axis labels) of the Series.

- **Series.array** The ExtensionArray of the data backing this Series or Index.
- **Series.values** Return Series as ndarray or ndarray-like depending on the dtype.
- Series.dtype Return the dtype object of the underlying data.
- Series.shape Return a tuple of the shape of the underlying data.
- Series.nbytes Return the number of bytes in the underlying data.
- **Series.ndim** Number of dimensions of the underlying data, by definition 1.
- Series.size Return the number of elements in the underlying data.
- Series.T Return the transpose, which is by definition self.
- Series.memory_usage ([index, deep]) Return the memory usage of the Series.
- Series.hasnans Return True if there are any NaNs.
- Series.empty Indicator whether Series/DataFrame is empty.
- Series.dtypes Return the dtype object of the underlying data.
- Series.name Return the name of the Series.
- **Series.flags** Get the properties associated with this pandas object.
- Series.set_flags (*[, copy, ...]) Return a new object with updated flags.

Conversion

- Series.astype (dtype[, copy, errors]) Cast a pandas object to a specified dtype dtype .
- Series.convert_dtypes ([infer_objects, ...]) Convert columns to the best possible dtypes using dtypes supporting pd.NA .
- Series.infer_objects ([copy]) Attempt to infer better dtypes for object columns.
- Series.copy ([deep]) Make a copy of this object's indices and data.
- Series.bool () (DEPRECATED) Return the bool of a single element Series or DataFrame.
- Series.to_numpy ([dtype, copy, na_value]) A NumPy ndarray representing the values in this Series or Index.
- Series.to_period ([freq, copy]) Convert Series from DatetimeIndex to PeriodIndex.
- Series.to_timestamp ([freq, how, copy]) Cast to DatetimeIndex of Timestamps, at beginning of period.
- Series.to_list () Return a list of the values.
- Series.__array__ ([dtype, copy]) Return the values as a NumPy array.

Indexing, iteration

- Series.get (key[, default]) Get item from object for given key (ex: DataFrame column).
- Series.at Access a single value for a row/column label pair.
- Series.iat Access a single value for a row/column pair by integer position.
- Series.loc Access a group of rows and columns by label(s) or a boolean array.
- **Series.iloc** (DEPRECATED) Purely integer-location based indexing for selection by position.
- Series.__iter__ () Return an iterator of the values.
- Series.items () Lazily iterate over (index, value) tuples.
- Series.keys () Return alias for index.
- Series.pop (item) Return item and drops from series.
- Series.item () Return the first element of the underlying data as a Python scalar.
- Series.xs (key[, axis, level, drop_level]) Return crosssection from the Series/DataFrame.

Binary operator functions

- Series.add (other[, level, fill_value, axis]) Return Addition of series and other, element-wise (binary operator add).
- Series.sub (other[, level, fill_value, axis]) Return Subtraction of series and other, element-wise (binary operator sub).
- Series.mul (other[, level, fill_value, axis]) Return Multiplication of series and other, element-wise (binary operator mul).
- Series.div (other[, level, fill_value, axis]) Return Floating division of series and other, element-wise (binary operator truediv).
- Series.truediv (other[, level, fill_value, axis]) Return Floating division of series and other, element-wise (binary operator truediv).
- Series.floordiv (other[, level, fill_value, axis]) Return Integer division of series and other, element-wise (binary operator floordiv).
- Series.mod (other[, level, fill_value, axis]) Return Modulo of series and other, element-wise (binary operator mod).
- Series.pow (other[, level, fill_value, axis]) Return Exponential power of series and other, element-wise (binary operator pow).
- Series.radd (other[, level, fill_value, axis]) Return Addition of series and other, element-wise (binary operator radd).

- Series.rsub (other[, level, fill_value, axis]) Return Subtraction of series and other, element-wise (binary operator rsub).
- Series.rmul (other[, level, fill_value, axis]) Return Multiplication of series and other, element-wise (binary operator rmul).
- Series.rdiv (other[, level, fill_value, axis]) Return Floating division of series and other, element-wise (binary operator rtruediv).
- Series.rtruediv (other[, level, fill_value, axis]) Return Floating division of series and other, element-wise (binary operator rtruediv).
- Series.rfloordiv (other[, level, fill_value, ...]) Return Integer division of series and other, element-wise (binary operator rfloordiv).
- Series.rmod (other[, level, fill_value, axis]) Return Modulo of series and other, element-wise (binary operator rmod).
- Series.rpow (other[, level, fill_value, axis]) Return Exponential power of series and other, element-wise (binary operator rpow).
- Series.combine (other, func[, fill_value]) Combine the Series with a Series or scalar according to func .
- Series.combine_first (other) Update null elements with value in the same location in 'other'.
- Series.round ([decimals]) Round each value in a Series to the given number of decimals.
- Series.lt (other[, level, fill_value, axis]) Return Less than of series and other, element-wise (binary operator lt).
- Series.gt (other[, level, fill_value, axis]) Return Greater than of series and other, element-wise (binary operator gt).
- Series.le (other[, level, fill_value, axis]) Return Less than or equal to of series and other, element-wise (binary operator le).
- Series.ge (other[, level, fill_value, axis]) Return Greater than or equal to of series and other, element-wise (binary operator ge).
- Series.ne (other[, level, fill_value, axis]) Return Not equal to of series and other, element-wise (binary operator ne).
- Series.eq (other[, level, fill_value, axis]) Return Equal to of series and other, element-wise (binary operator eq).
- Series.product ([axis, skipna, numeric_only, ...]) Return the product of the values over the requested axis.
- Series.dot (other) Compute the dot product between the Series and the columns of other.

Function application, GroupBy & window

• Series.apply (func[, convert_dtype, args, by_row]) - Invoke function on values of Series.

- Series.agg ([func, axis]) Aggregate using one or more operations over the specified axis.
- Series.aggregate ([func, axis]) Aggregate using one or more operations over the specified axis.
- Series.transform (func[, axis]) Call func on self producing a Series with the same axis shape as self.
- Series.map (arg[, na_action]) Map values of Series according to an input mapping or function.
- Series.groupby ([by, axis, level, as_index, ...]) Group Series using a mapper or by a Series of columns.
- Series.rolling (window[, min_periods, ...]) Provide rolling window calculations.
- Series.expanding ([min_periods, axis, method]) Provide expanding window calculations.
- Series.ewm ([com, span, halflife, alpha, ...]) Provide exponentially weighted (EW) calculations.
- Series.pipe (func, *args, **kwargs) Apply chainable functions that expect Series or DataFrames.

Computations / descriptive stats

- Series.abs () Return a Series/DataFrame with absolute numeric value of each element.
- Series.all ([axis, bool_only, skipna]) Return whether all elements are True, potentially over an axis.
- Series.any (*[, axis, bool_only, skipna]) Return whether any element is True, potentially over an axis.
- Series.autocorr ([lag]) Compute the lag-N autocorrelation.
- Series.between (left, right[, inclusive]) Return boolean Series equivalent to left <\= series <\= right.
- Series.clip ([lower, upper, axis, inplace]) Trim values at input threshold(s).
- Series.corr (other[, method, min_periods]) Compute correlation with other Series, excluding missing values.
- Series.count () Return number of non-NA/null observations in the Series.
- Series.cov (other[, min_periods, ddof]) Compute covariance with Series, excluding missing values.
- Series.cummax ([axis, skipna]) Return cumulative maximum over a DataFrame or Series axis.
- Series.cummin ([axis, skipna]) Return cumulative minimum over a DataFrame or Series axis.
- Series.cumprod ([axis, skipna]) Return cumulative product over a DataFrame or Series axis.
- Series.cumsum ([axis, skipna]) Return cumulative sum over a DataFrame or Series axis.
- Series.describe ([percentiles, include, exclude]) Generate descriptive statistics.
- Series.diff ([periods]) First discrete difference of element.

- Series.factorize ([sort, use_na_sentinel]) Encode the object as an enumerated type or categorical variable.
- Series.kurt ([axis, skipna, numeric_only]) Return unbiased kurtosis over requested axis.
- Series.max ([axis, skipna, numeric_only]) Return the maximum of the values over the requested axis.
- Series.mean ([axis, skipna, numeric_only]) Return the mean of the values over the requested axis.
- Series.median ([axis, skipna, numeric_only]) Return the median of the values over the requested axis.
- Series.min ([axis, skipna, numeric_only]) Return the minimum of the values over the requested axis.
- Series.mode ([dropna]) Return the mode(s) of the Series.
- Series.nlargest ([n, keep]) Return the largest n elements.
- Series.nsmallest ([n, keep]) Return the smallest n elements.
- Series.pct_change ([periods, fill_method, ...]) Fractional change between the current and a prior element.
- Series.prod ([axis, skipna, numeric_only, ...]) Return the product of the values over the requested axis.
- Series.quantile ([q, interpolation]) Return value at the given quantile.
- Series.rank ([axis, method, numeric_only, ...]) Compute numerical data ranks (1 through n) along axis.
- Series.sem ([axis, skipna, ddof, numeric_only]) Return unbiased standard error of the mean over requested axis.
- Series.skew ([axis, skipna, numeric_only]) Return unbiased skew over requested axis.
- Series.std ([axis, skipna, ddof, numeric_only]) Return sample standard deviation over requested axis.
- Series.sum ([axis, skipna, numeric_only, ...]) Return the sum of the values over the requested axis.
- Series.var ([axis, skipna, ddof, numeric_only]) Return unbiased variance over requested axis.
- Series.kurtosis ([axis, skipna, numeric_only]) Return unbiased kurtosis over requested axis.
- Series.unique () Return unique values of Series object.
- Series.nunique ([dropna]) Return number of unique elements in the object.
- Series.is_unique Return boolean if values in the object are unique.
- Series.is_monotonic_increasing Return boolean if values in the object are monotonically increasing.
- Series.is_monotonic_decreasing Return boolean if values in the object are monotonically decreasing.
- Series.value_counts ([normalize, sort, ...]) Return a Series containing counts of unique values.

Reindexing / selection / label manipulation

- Series.align (other[, join, axis, level, ...]) Align two objects on their axes with the specified join method.
- Series.case_when (caselist) Replace values where the conditions are True.
- Series.drop ([labels, axis, index, columns, ...]) Return Series with specified index labels removed.
- Series.droplevel (level[, axis]) Return Series/DataFrame with requested index / column level(s) removed.
- Series.drop_duplicates (*[, keep, inplace, ...]) Return Series with duplicate values removed.
- Series.duplicated ([keep]) Indicate duplicate Series values.
- Series.equals (other) Test whether two objects contain the same elements.
- Series.first (offset) (DEPRECATED) Select initial periods of time series data based on a date offset.
- Series.head ([n]) Return the first n rows.
- Series.idxmax ([axis, skipna]) Return the row label of the maximum value.
- Series.idxmin ([axis, skipna]) Return the row label of the minimum value.
- Series.isin (values) Whether elements in Series are contained in values .
- Series.last (offset) (DEPRECATED) Select final periods of time series data based on a date offset.
- Series.reindex ([index, axis, method, copy, ...]) Conform Series to new index with optional filling logic.
- Series.reindex_like (other[, method, copy, ...]) Return an object with matching indices as other object.
- Series.rename ([index, axis, copy, inplace, ...]) Alter Series index labels or name.
- Series.rename_axis ([mapper, index, axis, ...]) Set the name of the axis for the index or columns.
- Series.reset_index ([level, drop, name, ...]) Generate a new DataFrame or Series with the index reset.
- Series.sample ([n, frac, replace, weights, ...]) Return a random sample of items from an axis of object.
- Series.set_axis (labels, *[, axis, copy]) Assign desired index to given axis.
- Series.take (indices[, axis]) Return the elements in the given positional indices along an axis.
- Series.tail ([n]) Return the last n rows.
- Series.truncate ([before, after, axis, copy]) Truncate a Series or DataFrame before and after some index value.
- Series.where (cond[, other, inplace, axis, level]) Replace values where the condition is False.
- Series.mask (cond[, other, inplace, axis, level]) Replace values where the condition is True.

- Series.add_prefix (prefix[, axis]) Prefix labels with string prefix .
- Series.add_suffix (suffix[, axis]) Suffix labels with string suffix .
- Series.filter ([items, like, regex, axis]) Subset the dataframe rows or columns according to the specified index labels.

Missing data handling

- Series.backfill (*[, axis, inplace, limit, ...]) (DEPRECATED) Fill NA/NaN values by using the next valid observation to fill the gap.
- Series.bfill (*[, axis, inplace, limit, ...]) Fill NA/NaN values by using the next valid observation to fill the gap.
- Series.dropna (*[, axis, inplace, how, ...]) Return a new Series with missing values removed.
- Series.ffill (*[, axis, inplace, limit, ...]) Fill NA/NaN values by propagating the last valid observation to next valid.
- Series.fillna ([value, method, axis, ...]) Fill NA/NaN values using the specified method.
- Series.interpolate ([method, axis, limit, ...]) Fill NaN values using an interpolation method.
- Series.isna () Detect missing values.
- Series.isnull () Series.isnull is an alias for Series.isna.
- Series.notna () Detect existing (non-missing) values.
- Series.notnull () Series.notnull is an alias for Series.notna.
- Series.pad (*[, axis, inplace, limit, downcast]) (DEPRECATED) Fill NA/NaN values by propagating the last valid observation to next valid.
- Series.replace ([to_replace, value, inplace, ...]) Replace values given in to_replace with value .

Reshaping, sorting

- Series.argsort ([axis, kind, order, stable]) Return the integer indices that would sort the Series values.
- Series.argmin ([axis, skipna]) Return int position of the smallest value in the Series.
- Series.argmax ([axis, skipna]) Return int position of the largest value in the Series.
- Series.reorder_levels (order) Rearrange index levels using input order.
- Series.sort_values (*[, axis, ascending, ...]) Sort by the values.

- Series.sort_index (*[, axis, level, ...]) Sort Series by index labels.
- Series.swaplevel ([i, j, copy]) Swap levels i and j in a MultiIndex .
- Series.unstack ([level, fill_value, sort]) Unstack, also known as pivot, Series with MultiIndex to produce DataFrame.
- Series.explode ([ignore_index]) Transform each element of a list-like to a row.
- Series.searchsorted (value[, side, sorter]) Find indices where elements should be inserted to maintain order.
- Series.ravel ([order]) (DEPRECATED) Return the flattened underlying data as an ndarray or ExtensionArray.
- Series.repeat (repeats[, axis]) Repeat elements of a Series.
- Series.squeeze ([axis]) Squeeze 1 dimensional axis objects into scalars.
- Series.view ([dtype]) (DEPRECATED) Create a new view of the Series.

Combining / comparing / joining / merging

- Series.compare (other[, align_axis, ...]) Compare to another Series and show the differences.
- Series.update (other) Modify Series in place using values from passed Series.

Time Series-related

- Series.asfreq (freq[, method, how, ...]) Convert time series to specified frequency.
- Series.asof (where[, subset]) Return the last row(s) without any NaNs before where .
- Series.shift ([periods, freq, axis, ...]) Shift index by desired number of periods with an optional time freq .
- Series.first_valid_index () Return index for first non-NA value or None, if no non-NA value is found.
- Series.last_valid_index () Return index for last non-NA value or None, if no non-NA value is found.
- Series.resample (rule[, axis, closed, label, ...]) Resample time-series data.
- Series.tz_convert (tz[, axis, level, copy]) Convert tz-aware axis to target time zone.
- Series.tz_localize (tz[, axis, level, copy, ...]) Localize tz-naive index of a Series or DataFrame to target time zone.
- Series.at_time (time[, asof, axis]) Select values at particular time of day (e.g., 9:30AM).

• Series.between_time (start_time, end_time[, ...]) - Select values between particular times of the day (e.g., 9:00-9:30 AM).

Accessors

- Series.str alias of StringMethods
- Series.cat alias of CategoricalAccessor
- Series.dt alias of CombinedDatetimelikeProperties
- Series.sparse alias of SparseAccessor
- DataFrame.sparse alias of SparseFrameAccessor
- Index.str alias of StringMethods
- Datetime, Timedelta, Period dt
- String str
- Categorical cat
- Sparse sparse
- **Series.dt.date** Returns numpy array of python datetime.date objects.
- Series.dt.time Returns numpy array of datetime.time objects.
- **Series.dt.timetz** Returns numpy array of datetime.time objects with timezones.
- Series.dt.year The year of the datetime.
- Series.dt.month The month as January\=1, December\=12.
- Series.dt.day The day of the datetime.
- Series.dt.hour The hours of the datetime.
- Series.dt.minute The minutes of the datetime.
- Series.dt.second The seconds of the datetime.
- Series.dt.microsecond The microseconds of the datetime.
- Series.dt.nanosecond The nanoseconds of the datetime.
- Series.dt.dayofweek The day of the week with Monday\=0, Sunday\=6.
- Series.dt.day_of_week The day of the week with Monday\=0, Sunday\=6.
- Series.dt.weekday The day of the week with Monday\=0, Sunday\=6.
- Series.dt.dayofyear The ordinal day of the year.
- Series.dt.day of year The ordinal day of the year.
- Series.dt.days_in_month The number of days in the month.
- Series.dt.quarter The quarter of the date.
- **Series.dt.is_month_start** Indicates whether the date is the first day of the month.
- **Series.dt.is_month_end** Indicates whether the date is the last day of the month.
- Series.dt.is_quarter_start Indicator for whether the date is the first day of a quarter.
- Series.dt.is_quarter_end Indicator for whether the date is the last day of a quarter.
- **Series.dt.is_year_start** Indicate whether the date is the first day of a year.
- Series.dt.is_year_end Indicate whether the date is the last day of the year.

- Series.dt.is_leap_year Boolean indicator if the date belongs to a leap year.
- Series.dt.daysinmonth The number of days in the month.
- Series.dt.days in month The number of days in the month.
- Series.dt.tz Return the timezone.
- Series.dt.freq Return the frequency object for this PeriodArray.
- Series.dt.unit -
- Series.dt.isocalendar () Calculate year, week, and day according to the ISO 8601 standard.
- Series.dt.to_period (*args, **kwargs) Cast to PeriodArray/ PeriodIndex at a particular frequency.
- Series.dt.to_pydatetime () (DEPRECATED) Return the data as an array of datetime.datetime objects.
- Series.dt.tz_localize (*args, **kwargs) Localize tz-naive Datetime Array/Index to tz-aware Datetime Array/Index.
- Series.dt.tz_convert (*args, **kwargs) Convert tz-aware Datetime Array/Index from one time zone to another.
- Series.dt.normalize (*args, **kwargs) Convert times to midnight.
- Series.dt.strftime (*args, **kwargs) Convert to Index using specified date_format.
- Series.dt.round (*args, **kwargs) Perform round operation on the data to the specified freq .
- Series.dt.floor (*args, **kwargs) Perform floor operation on the data to the specified freq .
- Series.dt.ceil (*args, **kwargs) Perform ceil operation on the data to the specified freq .
- Series.dt.month_name (*args, **kwargs) Return the month names with specified locale.
- Series.dt.day_name (*args, **kwargs) Return the day names with specified locale.
- Series.dt.as_unit (*args, **kwargs) -
- Series.dt.qvear -
- Series.dt.start_time Get the Timestamp for the start of the period.
- Series.dt.end_time Get the Timestamp for the end of the period.
- Series.dt.days Number of days for each element.
- Series.dt.seconds Number of seconds (>\= 0 and less than 1 day) for each element.
- Series.dt.microseconds Number of microseconds (>\= 0 and less than 1 second) for each element.
- Series.dt.nanoseconds Number of nanoseconds (>\= 0 and less than 1 microsecond) for each element.
- **Series.dt.components** Return a Dataframe of the components of the Timedeltas.
- Series.dt.unit -
- Series.dt.to_pytimedelta () Return an array of native datetime.timedelta objects.
- Series.dt.total_seconds (*args, **kwargs) Return total duration of each element expressed in seconds.
- Series.dt.as_unit (*args, **kwargs) -

- Series.str.capitalize () Convert strings in the Series/ Index to be capitalized.
- Series.str.casefold () Convert strings in the Series/Index to be casefolded.
- Series.str.cat ([others, sep, na_rep, join]) Concatenate strings in the Series/Index with given separator.
- Series.str.center (width[, fillchar]) Pad left and right side of strings in the Series/Index.
- Series.str.contains (pat[, case, flags, na, ...]) Test if pattern or regex is contained within a string of a Series or Index.
- Series.str.count (pat[, flags]) Count occurrences of pattern in each string of the Series/Index.
- Series.str.decode (encoding[, errors]) Decode character string in the Series/Index using indicated encoding.
- Series.str.encode (encoding[, errors]) Encode character string in the Series/Index using indicated encoding.
- Series.str.endswith (pat[, na]) Test if the end of each string element matches a pattern.
- Series.str.extract (pat[, flags, expand]) Extract capture groups in the regex pat as columns in a DataFrame.
- Series.str.extractall (pat[, flags]) Extract capture groups in the regex pat as columns in DataFrame.
- Series.str.find (sub[, start, end]) Return lowest indexes in each strings in the Series/Index.
- Series.str.findall (pat[, flags]) Find all occurrences of pattern or regular expression in the Series/Index.
- Series.str.fullmatch (pat[, case, flags, na]) Determine if each string entirely matches a regular expression.
- Series.str.get (i) Extract element from each component at specified position or with specified key.
- Series.str.index (sub[, start, end]) Return lowest indexes in each string in Series/Index.
- Series.str.join (sep) Join lists contained as elements in the Series/Index with passed delimiter.
- Series.str.len () Compute the length of each element in the Series/Index.
- Series.str.ljust (width[, fillchar]) Pad right side of strings in the Series/Index.
- Series.str.lower () Convert strings in the Series/Index to lowercase.
- Series.str.lstrip ([to_strip]) Remove leading characters.
- Series.str.match (pat[, case, flags, na]) Determine if each string starts with a match of a regular expression.
- Series.str.normalize (form) Return the Unicode normal form for the strings in the Series/Index.
- Series.str.pad (width[, side, fillchar]) Pad strings in the Series/Index up to width.
- Series.str.partition ([sep, expand]) Split the string at the first occurrence of sep .
- Series.str.removeprefix (prefix) Remove a prefix from an object series.

- Series.str.removesuffix (suffix) Remove a suffix from an object series.
- Series.str.repeat (repeats) Duplicate each string in the Series or Index.
- Series.str.replace (pat, repl[, n, case, ...]) Replace each occurrence of pattern/regex in the Series/Index.
- Series.str.rfind (sub[, start, end]) Return highest indexes in each strings in the Series/Index.
- Series.str.rindex (sub[, start, end]) Return highest indexes in each string in Series/Index.
- Series.str.rjust (width[, fillchar]) Pad left side of strings in the Series/Index.
- Series.str.rpartition ([sep, expand]) Split the string at the last occurrence of sep .
- Series.str.rstrip ([to_strip]) Remove trailing characters.
- Series.str.slice ([start, stop, step]) Slice substrings from each element in the Series or Index.
- Series.str.slice_replace ([start, stop, repl]) Replace a positional slice of a string with another value.
- Series.str.split ([pat, n, expand, regex]) Split strings around given separator/delimiter.
- Series.str.rsplit ([pat, n, expand]) Split strings around given separator/delimiter.
- Series.str.startswith (pat[, na]) Test if the start of each string element matches a pattern.
- Series.str.strip ([to_strip]) Remove leading and trailing characters.
- Series.str.swapcase () Convert strings in the Series/Index to be swapcased.
- Series.str.title () Convert strings in the Series/Index to titlecase.
- Series.str.translate (table) Map all characters in the string through the given mapping table.
- Series.str.upper () Convert strings in the Series/Index to uppercase.
- Series.str.wrap (width, **kwargs) Wrap strings in Series/ Index at specified line width.
- Series.str.zfill (width) Pad strings in the Series/Index by prepending '0' characters.
- Series.str.isalnum () Check whether all characters in each string are alphanumeric.
- Series.str.isalpha () Check whether all characters in each string are alphabetic.
- Series.str.isdigit () Check whether all characters in each string are digits.
- **Series.str.isspace** () Check whether all characters in each string are whitespace.
- Series.str.islower () Check whether all characters in each string are lowercase.
- Series.str.isupper () Check whether all characters in each string are uppercase.
- Series.str.istitle () Check whether all characters in each string are titlecase.

- Series.str.isnumeric () Check whether all characters in each string are numeric.
- Series.str.isdecimal () Check whether all characters in each string are decimal.
- Series.str.get_dummies ([sep]) Return DataFrame of dummy/indicator variables for Series.
- Series.cat.categories The categories of this categorical.
- **Series.cat.ordered** Whether the categories have an ordered relationship.
- Series.cat.codes Return Series of codes as well as the index.
- Series.cat.rename_categories (*args, **kwargs) Rename categories.
- Series.cat.reorder_categories (*args, **kwargs) Reorder categories as specified in new categories.
- Series.cat.add_categories (*args, **kwargs) Add new categories.
- Series.cat.remove_categories (*args, **kwargs) Remove the specified categories.
- Series.cat.remove_unused_categories (*args, ...) Remove categories which are not used.
- Series.cat.set_categories (*args, **kwargs) Set the categories to the specified new categories.
- Series.cat.as_ordered (*args, **kwargs) Set the Categorical to be ordered.
- Series.cat.as_unordered (*args, **kwargs) Set the Categorical to be unordered.
- Series.sparse.npoints The number of non- fill_value points.
- Series.sparse.density The percent of non- fill_value points, as decimal.
- Series.sparse.fill_value Elements in data that are fill_value are not stored.
- Series.sparse.sp_values An indarray containing the non-fill value values.
- Series.sparse.from_coo (A[, dense_index]) Create a Series with sparse values from a scipy.sparse.coo_matrix.
- Series.sparse.to_coo ([row_levels, ...]) Create a scipy.sparse.coo_matrix from a Series with MultiIndex.
- Series.list.flatten () Flatten list values.
- **Series.list.len ()** Return the length of each list in the Series.
- Series.list.__getitem__ (key) Index or slice lists in the Series.
- Series.struct.dtypes Return the dtype object of each child field of the struct.
- Series.struct.field (name_or_index) Extract a child field of a struct as a Series.
- Series.struct.explode () Extract all child fields of a struct as a DataFrame.
- Flags (obj, *, allows_duplicate_labels) Flags that apply to pandas objects.

• Series.attrs - Dictionary of global attributes of this dataset.

Plotting

- Series.plot ([kind, ax, figsize,]) Series plotting accessor and method
- Series.plot.area ([x, y, stacked]) Draw a stacked area plot.
- Series.plot.bar ([x, y]) Vertical bar plot.
- Series.plot.barh ([x, y]) Make a horizontal bar plot.
- Series.plot.box ([by]) Make a box plot of the DataFrame columns.
- Series.plot.density ([bw_method, ind]) Generate Kernel Density Estimate plot using Gaussian kernels.
- Series.plot.hist ([by, bins]) Draw one histogram of the DataFrame's columns.
- Series.plot.kde ([bw_method, ind]) Generate Kernel Density Estimate plot using Gaussian kernels.
- Series.plot.line ([x, y]) Plot Series or DataFrame as lines.
- Series.plot.pie (**kwargs) Generate a pie plot.
- Series.hist ([by, ax, grid, xlabelsize, ...]) Draw histogram of the input series using matplotlib.

Serialization / IO / conversion

- Series.to_pickle (path, *[, compression, ...]) Pickle (serialize) object to file.
- Series.to_csv ([path_or_buf, sep, na_rep, ...]) Write object to a comma-separated values (csv) file.
- Series.to_dict (*[, into]) Convert Series to {label -> value} dict or dict-like object.
- Series.to_excel (excel_writer, *[, ...]) Write object to an Excel sheet.
- Series.to_frame ([name]) Convert Series to DataFrame.
- Series.to_xarray () Return an xarray object from the pandas object.
- Series.to_hdf (path_or_buf, *, key[, mode, ...]) Write the contained data to an HDF5 file using HDFStore.
- Series.to_sql (name, con, *[, schema, ...]) Write records stored in a DataFrame to a SQL database.
- Series.to_json ([path_or_buf, orient, ...]) Convert the object to a JSON string.
- Series.to_string ([buf, na_rep, ...]) Render a string representation of the Series.
- Series.to_clipboard (*[, excel, sep]) Copy object to the system clipboard.

- Series.to_latex ([buf, columns, header, ...]) Render object to a LaTeX tabular, longtable, or nested table.
- Series.to_markdown ([buf, mode, index, ...]) Print Series in Markdown-friendly format.

DataFrame

Constructor

• DataFrame ([data, index, columns, dtype, copy]) - Twodimensional, size-mutable, potentially heterogeneous tabular data.

Attributes and underlying data

- DataFrame.index The index (row labels) of the DataFrame.
- DataFrame.columns The column labels of the DataFrame.
- DataFrame.dtypes Return the dtypes in the DataFrame.
- DataFrame.info ([verbose, buf, max_cols, ...]) Print a concise summary of a DataFrame.
- DataFrame.select_dtypes ([include, exclude]) Return a subset of the DataFrame's columns based on the column dtypes.
- DataFrame.values Return a Numpy representation of the DataFrame.
- DataFrame.axes Return a list representing the axes of the DataFrame.
- DataFrame.ndim Return an int representing the number of axes / array dimensions.
- DataFrame.size Return an int representing the number of elements in this object.
- DataFrame.shape Return a tuple representing the dimensionality of the DataFrame.
- DataFrame.memory_usage ([index, deep]) Return the memory usage of each column in bytes.
- DataFrame.empty Indicator whether Series/DataFrame is empty.
- DataFrame.set_flags (*[, copy, ...]) Return a new object with updated flags.

Conversion

- DataFrame.astype (dtype[, copy, errors]) Cast a pandas object to a specified dtype dtype .
- DataFrame.convert_dtypes ([infer_objects, ...]) Convert columns to the best possible dtypes using dtypes supporting pd.NA .

- DataFrame.infer_objects ([copy]) Attempt to infer better dtypes for object columns.
- DataFrame.copy ([deep]) Make a copy of this object's indices and data.
- DataFrame.bool () (DEPRECATED) Return the bool of a single element Series or DataFrame.
- DataFrame.to_numpy ([dtype, copy, na_value]) Convert the DataFrame to a NumPy array.

Indexing, iteration

- DataFrame.head ([n]) Return the first n rows.
- DataFrame.at Access a single value for a row/column label pair.
- DataFrame.iat Access a single value for a row/column pair by integer position.
- DataFrame.loc Access a group of rows and columns by label(s) or a boolean array.
- DataFrame.iloc (DEPRECATED) Purely integer-location based indexing for selection by position.
- DataFrame.insert (loc, column, value[, ...]) Insert column into DataFrame at specified location.
- DataFrame.__iter__ () Iterate over info axis.
- DataFrame.items () Iterate over (column name, Series) pairs.
- DataFrame.keys () Get the 'info axis' (see Indexing for more).
- DataFrame.iterrows () Iterate over DataFrame rows as (index, Series) pairs.
- DataFrame.itertuples ([index, name]) Iterate over DataFrame rows as namedtuples.
- DataFrame.pop (item) Return item and drop from frame.
- DataFrame.tail ([n]) Return the last n rows.
- DataFrame.xs (key[, axis, level, drop_level]) Return cross-section from the Series/DataFrame.
- DataFrame.get (key[, default]) Get item from object for given key (ex: DataFrame column).
- DataFrame.isin (values) Whether each element in the DataFrame is contained in values.
- DataFrame.where (cond[, other, inplace, ...]) Replace values where the condition is False.
- DataFrame.mask (cond[, other, inplace, axis, ...]) Replace values where the condition is True.
- DataFrame.query (expr, *[, inplace]) Query the columns of a DataFrame with a boolean expression.

Binary operator functions

- DataFrame.__add__ (other) Get Addition of DataFrame and other, column-wise.
- DataFrame.add (other[, axis, level, fill_value]) Get Addition of dataframe and other, element-wise (binary operator add).
- DataFrame.sub (other[, axis, level, fill_value]) Get Subtraction of dataframe and other, element-wise (binary operator sub).
- DataFrame.mul (other[, axis, level, fill_value]) Get Multiplication of dataframe and other, element-wise (binary operator mul).
- DataFrame.div (other[, axis, level, fill_value]) Get Floating division of dataframe and other, element-wise (binary operator truediv).
- DataFrame.truediv (other[, axis, level, ...]) Get Floating division of dataframe and other, element-wise (binary operator truediv).
- DataFrame.floordiv (other[, axis, level, ...]) Get Integer division of dataframe and other, element-wise (binary operator floordiv).
- DataFrame.mod (other[, axis, level, fill_value]) Get Modulo of dataframe and other, element-wise (binary operator mod).
- DataFrame.pow (other[, axis, level, fill_value]) Get Exponential power of dataframe and other, element-wise (binary operator pow).
- DataFrame.dot (other) Compute the matrix multiplication between the DataFrame and other.
- DataFrame.radd (other[, axis, level, fill_value]) Get Addition of dataframe and other, element-wise (binary operator radd).
- DataFrame.rsub (other[, axis, level, fill_value]) Get Subtraction of dataframe and other, element-wise (binary operator rsub).
- DataFrame.rmul (other[, axis, level, fill_value]) Get Multiplication of dataframe and other, element-wise (binary operator rmul).
- DataFrame.rdiv (other[, axis, level, fill_value]) Get Floating division of dataframe and other, element-wise (binary operator rtruediv).
- DataFrame.rtruediv (other[, axis, level, ...]) Get Floating division of dataframe and other, element-wise (binary operator rtruediv).
- DataFrame.rfloordiv (other[, axis, level, ...]) Get Integer division of dataframe and other, element-wise (binary operator rfloordiv).
- DataFrame.rmod (other[, axis, level, fill_value]) Get Modulo of dataframe and other, element-wise (binary operator rmod).

- DataFrame.rpow (other[, axis, level, fill_value]) Get Exponential power of dataframe and other, element-wise (binary operator rpow).
- DataFrame.lt (other[, axis, level]) Get Less than of dataframe and other, element-wise (binary operator lt).
- DataFrame.gt (other[, axis, level]) Get Greater than of dataframe and other, element-wise (binary operator gt).
- DataFrame.le (other[, axis, level]) Get Less than or equal to of dataframe and other, element-wise (binary operator le).
- DataFrame.ge (other[, axis, level]) Get Greater than or equal to of dataframe and other, element-wise (binary operator ge).
- DataFrame.ne (other[, axis, level]) Get Not equal to of dataframe and other, element-wise (binary operator ne).
- DataFrame.eq (other[, axis, level]) Get Equal to of dataframe and other, element-wise (binary operator eq).
- DataFrame.combine (other, func[, fill_value, ...]) Perform column-wise combine with another DataFrame.
- DataFrame.combine_first (other) Update null elements with value in the same location in other .

Function application, GroupBy & window

- DataFrame.apply (func[, axis, raw, ...]) Apply a function along an axis of the DataFrame.
- DataFrame.map (func[, na_action]) Apply a function to a Dataframe elementwise.
- DataFrame.applymap (func[, na_action]) (DEPRECATED) Apply a function to a Dataframe elementwise.
- DataFrame.pipe (func, *args, **kwargs) Apply chainable functions that expect Series or DataFrames.
- DataFrame.agg ([func, axis]) Aggregate using one or more operations over the specified axis.
- DataFrame.aggregate ([func, axis]) Aggregate using one or more operations over the specified axis.
- DataFrame.transform (func[, axis]) Call func on self producing a DataFrame with the same axis shape as self.
- DataFrame.groupby ([by, axis, level, ...]) Group DataFrame using a mapper or by a Series of columns.
- DataFrame.rolling (window[, min_periods, ...]) Provide rolling window calculations.
- DataFrame.expanding ([min_periods, axis, method]) Provide expanding window calculations.
- DataFrame.ewm ([com, span, halflife, alpha, ...]) Provide exponentially weighted (EW) calculations.

Computations / descriptive stats

- DataFrame.abs () Return a Series/DataFrame with absolute numeric value of each element.
- DataFrame.all ([axis, bool_only, skipna]) Return whether all elements are True, potentially over an axis.
- DataFrame.any (*[, axis, bool_only, skipna]) Return whether any element is True, potentially over an axis.
- DataFrame.clip ([lower, upper, axis, inplace]) Trim values at input threshold(s).
- DataFrame.corr ([method, min_periods, ...]) Compute pairwise correlation of columns, excluding NA/null values.
- DataFrame.corrwith (other[, axis, drop, ...]) Compute pairwise correlation.
- DataFrame.count ([axis, numeric_only]) Count non-NA cells for each column or row.
- DataFrame.cov ([min_periods, ddof, numeric_only]) Compute pairwise covariance of columns, excluding NA/null values.
- DataFrame.cummax ([axis, skipna]) Return cumulative maximum over a DataFrame or Series axis.
- DataFrame.cummin ([axis, skipna]) Return cumulative minimum over a DataFrame or Series axis.
- DataFrame.cumprod ([axis, skipna]) Return cumulative product over a DataFrame or Series axis.
- DataFrame.cumsum ([axis, skipna]) Return cumulative sum over a DataFrame or Series axis.
- DataFrame.describe ([percentiles, include, ...]) Generate descriptive statistics.
- DataFrame.diff ([periods, axis]) First discrete difference of element.
- DataFrame.eval (expr, *[, inplace]) Evaluate a string describing operations on DataFrame columns.
- DataFrame.kurt ([axis, skipna, numeric_only]) Return unbiased kurtosis over requested axis.
- DataFrame.kurtosis ([axis, skipna, numeric_only]) Return unbiased kurtosis over requested axis.
- DataFrame.max ([axis, skipna, numeric_only]) Return the maximum of the values over the requested axis.
- DataFrame.mean ([axis, skipna, numeric_only]) Return the mean of the values over the requested axis.
- DataFrame.median ([axis, skipna, numeric_only]) Return the median of the values over the requested axis.
- DataFrame.min ([axis, skipna, numeric_only]) Return the minimum of the values over the requested axis.
- DataFrame.mode ([axis, numeric_only, dropna]) Get the mode(s) of each element along the selected axis.
- DataFrame.pct_change ([periods, fill_method, ...]) Fractional change between the current and a prior element.
- DataFrame.prod ([axis, skipna, numeric_only, ...]) Return the product of the values over the requested axis.
- DataFrame.product ([axis, skipna, ...]) Return the product of the values over the requested axis.

- DataFrame.quantile ([q, axis, numeric_only, ...]) Return values at the given quantile over requested axis.
- DataFrame.rank ([axis, method, numeric_only, ...]) Compute numerical data ranks (1 through n) along axis.
- DataFrame.round ([decimals]) Round a DataFrame to a variable number of decimal places.
- DataFrame.sem ([axis, skipna, ddof, numeric_only]) Return unbiased standard error of the mean over requested axis.
- DataFrame.skew ([axis, skipna, numeric_only]) Return unbiased skew over requested axis.
- DataFrame.sum ([axis, skipna, numeric_only, ...]) Return the sum of the values over the requested axis.
- DataFrame.std ([axis, skipna, ddof, numeric_only]) Return sample standard deviation over requested axis.
- DataFrame.var ([axis, skipna, ddof, numeric_only]) Return unbiased variance over requested axis.
- DataFrame.nunique ([axis, dropna]) Count number of distinct elements in specified axis.
- DataFrame.value_counts ([subset, normalize, ...]) Return a Series containing the frequency of each distinct row in the Dataframe.

Reindexing / selection / label manipulation

- DataFrame.add_prefix (prefix[, axis]) Prefix labels with string prefix .
- DataFrame.add_suffix (suffix[, axis]) Suffix labels with string suffix .
- DataFrame.align (other[, join, axis, level, ...]) Align two objects on their axes with the specified join method.
- DataFrame.at_time (time[, asof, axis]) Select values at particular time of day (e.g., 9:30AM).
- DataFrame.between_time (start_time, end_time) Select values between particular times of the day (e.g., 9:00-9:30 AM).
- DataFrame.drop ([labels, axis, index, ...]) Drop specified labels from rows or columns.
- DataFrame.drop_duplicates ([subset, keep, ...]) Return DataFrame with duplicate rows removed.
- DataFrame.duplicated ([subset, keep]) Return boolean Series denoting duplicate rows.
- DataFrame.equals (other) Test whether two objects contain the same elements.
- DataFrame.filter ([items, like, regex, axis]) Subset the dataframe rows or columns according to the specified index labels.
- DataFrame.first (offset) (DEPRECATED) Select initial periods of time series data based on a date offset.
- DataFrame.head ([n]) Return the first n rows.

- DataFrame.idxmax ([axis, skipna, numeric_only]) Return index of first occurrence of maximum over requested axis.
- DataFrame.idxmin ([axis, skipna, numeric_only]) Return index of first occurrence of minimum over requested axis.
- DataFrame.last (offset) (DEPRECATED) Select final periods of time series data based on a date offset.
- DataFrame.reindex ([labels, index, columns, ...]) Conform DataFrame to new index with optional filling logic.
- DataFrame.reindex_like (other[, method, ...]) Return an object with matching indices as other object.
- DataFrame.rename ([mapper, index, columns, ...]) Rename columns or index labels.
- DataFrame.rename_axis ([mapper, index, ...]) Set the name of the axis for the index or columns.
- DataFrame.reset_index ([level, drop, ...]) Reset the index, or a level of it.
- DataFrame.sample ([n, frac, replace, ...]) Return a random sample of items from an axis of object.
- DataFrame.set_axis (labels, *[, axis, copy]) Assign desired index to given axis.
- DataFrame.set_index (keys, *[, drop, append, ...]) Set the DataFrame index using existing columns.
- DataFrame.tail ([n]) Return the last n rows.
- DataFrame.take (indices[, axis]) Return the elements in the given positional indices along an axis.
- DataFrame.truncate ([before, after, axis, copy]) Truncate a Series or DataFrame before and after some index value.

Missing data handling

- DataFrame.backfill (*[, axis, inplace, ...]) (DEPRECATED) Fill NA/NaN values by using the next valid observation to fill the gap.
- DataFrame.bfill (*[, axis, inplace, limit, ...]) Fill NA/ NaN values by using the next valid observation to fill the gap.
- DataFrame.dropna (*[, axis, how, thresh, ...]) Remove missing values.
- DataFrame.ffill (*[, axis, inplace, limit, ...]) Fill NA/ NaN values by propagating the last valid observation to next valid.
- DataFrame.fillna ([value, method, axis, ...]) Fill NA/NaN values using the specified method.
- DataFrame.interpolate ([method, axis, limit, ...]) Fill NaN values using an interpolation method.
- DataFrame.isna () Detect missing values.
- DataFrame.isnull () DataFrame.isnull is an alias for DataFrame.isna.
- DataFrame.notna () Detect existing (non-missing) values.
- DataFrame.notnull () DataFrame.notnull is an alias for DataFrame.notna.

- DataFrame.pad (*[, axis, inplace, limit, ...]) (DEPRECATED) Fill NA/NaN values by propagating the last valid observation to next valid.
- DataFrame.replace ([to_replace, value, ...]) Replace values given in to_replace with value .

Reshaping, sorting, transposing

- DataFrame.droplevel (level[, axis]) Return Series/DataFrame with requested index / column level(s) removed.
- DataFrame.pivot (*, columns[, index, values]) Return reshaped DataFrame organized by given index / column values.
- DataFrame.pivot_table ([values, index, ...]) Create a spreadsheet-style pivot table as a DataFrame.
- DataFrame.reorder_levels (order[, axis]) Rearrange index levels using input order.
- DataFrame.sort_values (by, *[, axis, ...]) Sort by the values along either axis.
- DataFrame.sort_index (*[, axis, level, ...]) Sort object by labels (along an axis).
- DataFrame.nlargest (n, columns[, keep]) Return the first n rows ordered by columns in descending order.
- DataFrame.nsmallest (n, columns[, keep]) Return the first n rows ordered by columns in ascending order.
- DataFrame.swaplevel ([i, j, axis]) Swap levels i and j in a MultiIndex .
- DataFrame.stack ([level, dropna, sort, ...]) Stack the prescribed level(s) from columns to index.
- DataFrame.unstack ([level, fill_value, sort]) Pivot a level of the (necessarily hierarchical) index labels.
- DataFrame.swapaxes (axis1, axis2[, copy]) (DEPRECATED) Interchange axes and swap values axes appropriately.
- DataFrame.melt ([id_vars, value_vars, ...]) Unpivot a DataFrame from wide to long format, optionally leaving identifiers set.
- DataFrame.explode (column[, ignore_index]) Transform each element of a list-like to a row, replicating index values.
- DataFrame.squeeze ([axis]) Squeeze 1 dimensional axis objects into scalars.
- DataFrame.to_xarray () Return an xarray object from the pandas object.
- DataFrame.T The transpose of the DataFrame.
- DataFrame.transpose (*args[, copy]) Transpose index and columns.

Combining / comparing / joining / merging

- DataFrame.assign (**kwargs) Assign new columns to a DataFrame.
- DataFrame.compare (other[, align_axis, ...]) Compare to another DataFrame and show the differences.
- DataFrame.join (other[, on, how, lsuffix, ...]) Join columns of another DataFrame.
- DataFrame.merge (right[, how, on, left_on, ...]) Merge DataFrame or named Series objects with a database-style join.
- DataFrame.update (other[, join, overwrite, ...]) Modify in place using non-NA values from another DataFrame.

Time Series-related

- DataFrame.asfreq (freq[, method, how, ...]) Convert time series to specified frequency.
- DataFrame.asof (where[, subset]) Return the last row(s) without any NaNs before where .
- DataFrame.shift ([periods, freq, axis, ...]) Shift index by desired number of periods with an optional time freq .
- DataFrame.first_valid_index () Return index for first non-NA value or None, if no non-NA value is found.
- DataFrame.last_valid_index () Return index for last non-NA value or None, if no non-NA value is found.
- DataFrame.resample (rule[, axis, closed, ...]) Resample time-series data.
- DataFrame.to_period ([freq, axis, copy]) Convert DataFrame from DatetimeIndex to PeriodIndex.
- DataFrame.to_timestamp ([freq, how, axis, copy]) Cast to DatetimeIndex of timestamps, at beginning of period.
- DataFrame.tz_convert (tz[, axis, level, copy]) Convert tz-aware axis to target time zone.
- DataFrame.tz_localize (tz[, axis, level, ...]) Localize tznaive index of a Series or DataFrame to target time zone.

Flags

• Flags (obj, *, allows_duplicate_labels) - Flags that apply to pandas objects.

Metadata

• DataFrame.attrs - Dictionary of global attributes of this dataset.

Plotting

- DataFrame.plot ([x, y, kind, ax,]) DataFrame plotting accessor and method
- DataFrame.plot.area ([x, y, stacked]) Draw a stacked area plot.
- DataFrame.plot.bar ([x, y]) Vertical bar plot.
- DataFrame.plot.barh ([x, y]) Make a horizontal bar plot.
- DataFrame.plot.box ([by]) Make a box plot of the DataFrame columns.
- DataFrame.plot.density ([bw_method, ind]) Generate Kernel Density Estimate plot using Gaussian kernels.
- DataFrame.plot.hexbin (x, y[, C, ...]) Generate a hexagonal binning plot.
- DataFrame.plot.hist ([by, bins]) Draw one histogram of the DataFrame's columns.
- DataFrame.plot.kde ([bw_method, ind]) Generate Kernel Density Estimate plot using Gaussian kernels.
- DataFrame.plot.line ([x, y]) Plot Series or DataFrame as lines.
- DataFrame.plot.pie (**kwargs) Generate a pie plot.
- DataFrame.plot.scatter (x, y[, s, c]) Create a scatter plot with varying marker point size and color.
- DataFrame.boxplot ([column, by, ax, ...]) Make a box plot from DataFrame columns.
- DataFrame.hist ([column, by, grid, ...]) Make a histogram of the DataFrame's columns.

Sparse accessor

- DataFrame.sparse.density Ratio of non-sparse points to total (dense) data points.
- DataFrame.sparse.from_spmatrix (data[, ...]) Create a new DataFrame from a scipy sparse matrix.
- DataFrame.sparse.to_coo () Return the contents of the frame as a sparse SciPy COO matrix.
- DataFrame.sparse.to_dense () Convert a DataFrame with sparse values to dense.

Serialization / IO / conversion

- DataFrame.from_dict (data[, orient, dtype, ...]) Construct DataFrame from dict of array-like or dicts.
- DataFrame.from_records (data[, index, ...]) Convert structured or record ndarray to DataFrame.
- DataFrame.to_orc ([path, engine, index, ...]) Write a DataFrame to the ORC format.

- DataFrame.to_parquet ([path, engine, ...]) Write a DataFrame to the binary parquet format.
- DataFrame.to_pickle (path, *[, compression, ...]) Pickle (serialize) object to file.
- DataFrame.to_csv ([path_or_buf, sep, na_rep, ...]) Write object to a comma-separated values (csv) file.
- DataFrame.to_hdf (path_or_buf, *, key[, ...]) Write the contained data to an HDF5 file using HDFStore.
- DataFrame.to_sql (name, con, *[, schema, ...]) Write records stored in a DataFrame to a SQL database.
- DataFrame.to_dict ([orient, into, index]) Convert the DataFrame to a dictionary.
- DataFrame.to_excel (excel_writer, *[, ...]) Write object to an Excel sheet.
- DataFrame.to_json ([path_or_buf, orient, ...]) Convert the object to a JSON string.
- DataFrame.to_html ([buf, columns, col_space, ...]) Render a DataFrame as an HTML table.
- DataFrame.to_feather (path, **kwargs) Write a DataFrame to the binary Feather format.
- DataFrame.to_latex ([buf, columns, header, ...]) Render object to a LaTeX tabular, longtable, or nested table.
- DataFrame.to_stata (path, *[, convert_dates, ...]) Export DataFrame object to Stata dta format.
- DataFrame.to_gbq (destination_table, *[, ...]) (DEPRECATED) Write a DataFrame to a Google BigQuery table.
- DataFrame.to_records ([index, column_dtypes, ...]) Convert DataFrame to a NumPy record array.
- DataFrame.to_string ([buf, columns, ...]) Render a DataFrame to a console-friendly tabular output.
- DataFrame.to_clipboard (*[, excel, sep]) Copy object to the system clipboard.
- DataFrame.to_markdown ([buf, mode, index, ...]) Print DataFrame in Markdown-friendly format.
- DataFrame.style Returns a Styler object.
- DataFrame.__dataframe__ ([nan_as_null, ...]) Return the dataframe interchange object implementing the interchange protocol.

pandas arrays, scalars, and data types

Objects

- array (data[, dtype, copy]) Create an array.
- arrays.ArrowExtensionArray (values) Pandas ExtensionArray backed by a PyArrow ChunkedArray.
- ArrowDtype (pyarrow_dtype) An ExtensionDtype for PyArrow data types.

- Timestamp ([ts_input, year, month, day, ...]) Pandas replacement for python datetime.datetime object.
- **Timestamp.asm8** Return numpy datetime64 format in nanoseconds.
- Timestamp.day -
- Timestamp.dayofweek Return day of the week.
- Timestamp.day_of_week Return day of the week.
- Timestamp.dayofyear Return the day of the year.
- Timestamp.day_of_year Return the day of the year.
- **Timestamp.days_in_month** Return the number of days in the month.
- **Timestamp.daysinmonth** Return the number of days in the month.
- Timestamp.fold -
- Timestamp.hour -
- Timestamp.is_leap_year Return True if year is a leap year.
- Timestamp.is_month_end Check if the date is the last day of the month.
- **Timestamp.is_month_start** Check if the date is the first day of the month.
- Timestamp.is_quarter_end Check if date is last day of the quarter.
- **Timestamp.is_quarter_start** Check if the date is the first day of the quarter.
- **Timestamp.is_year_end** Return True if date is last day of the year.
- Timestamp.is_year_start Return True if date is first day of the year.
- Timestamp.max -
- Timestamp.microsecond -
- Timestamp.min -
- Timestamp.minute -
- Timestamp.month -
- Timestamp.nanosecond -
- Timestamp.quarter Return the quarter of the year.
- Timestamp.resolution -
- Timestamp.second -
- Timestamp.tz Alias for tzinfo.
- Timestamp.tzinfo -
- **Timestamp.unit** The abbreviation associated with self._creso.
- Timestamp.value -
- Timestamp.week Return the week number of the year.
- Timestamp.weekofyear Return the week number of the year.
- Timestamp.year -
- Timestamp.as_unit (unit[, round_ok]) Convert the underlying int64 representation to the given unit.
- **Timestamp.astimezone (tz)** Convert timezone-aware Timestamp to another time zone.
- Timestamp.ceil (freq[, ambiguous, nonexistent]) Return a new Timestamp ceiled to this resolution.
- Timestamp.combine (date, time) Combine date, time into datetime with same date and time fields.

- Timestamp.ctime () Return ctime() style string.
- **Timestamp.date ()** Return date object with same year, month and day.
- Timestamp.day_name ([locale]) Return the day name of the Timestamp with specified locale.
- **Timestamp.dst ()** Return the daylight saving time (DST) adjustment.
- Timestamp.floor (freq[, ambiguous, nonexistent]) Return a new Timestamp floored to this resolution.
- Timestamp.fromordinal (ordinal[, tz]) Construct a timestamp from a a proleptic Gregorian ordinal.
- **Timestamp.fromtimestamp (ts)** Transform timestamp[, tz] to tz's local time from POSIX timestamp.
- Timestamp.isocalendar () Return a named tuple containing ISO year, week number, and weekday.
- Timestamp.isoformat ([sep, timespec]) Return the time formatted according to ISO 8601.
- Timestamp.isoweekday () Return the day of the week represented by the date.
- Timestamp.month_name ([locale]) Return the month name of the Timestamp with specified locale.
- **Timestamp.normalize ()** Normalize Timestamp to midnight, preserving tz information.
- **Timestamp.now** ([tz]) Return new Timestamp object representing current time local to tz.
- Timestamp.replace ([year, month, day, hour, ...]) Implements datetime.replace, handles nanoseconds.
- Timestamp.round (freq[, ambiguous, nonexistent]) Round the Timestamp to the specified resolution.
- Timestamp.strftime (format) Return a formatted string of the Timestamp.
- Timestamp.strptime (string, format) Function is not implemented.
- **Timestamp.time ()** Return time object with same time but with tzinfo\=None.
- Timestamp.timestamp () Return POSIX timestamp as float.
- **Timestamp.timetuple ()** Return time tuple, compatible with time.localtime().
- **Timestamp.timetz ()** Return time object with same time and tzinfo.
- Timestamp.to_datetime64 () Return a numpy.datetime64 object with same precision.
- Timestamp.to_numpy ([dtype, copy]) Convert the Timestamp to a NumPy datetime64.
- Timestamp.to_julian_date () Convert TimeStamp to a Julian Date.
- Timestamp.to_period ([freq]) Return an period of which this timestamp is an observation.
- **Timestamp.to_pydatetime ([warn])** Convert a Timestamp object to a native Python datetime object.
- Timestamp.today ([tz]) Return the current time in the local timezone.
- Timestamp.toordinal () Return proleptic Gregorian ordinal.

- Timestamp.tz_convert (tz) Convert timezone-aware Timestamp to another time zone.
- Timestamp.tz_localize (tz[, ambiguous, ...]) Localize the Timestamp to a timezone.
- Timestamp.tzname () Return time zone name.
- Timestamp.utcfromtimestamp (ts) Construct a timezone-aware UTC datetime from a POSIX timestamp.
- Timestamp.utcnow () Return a new Timestamp representing UTC day and time.
- Timestamp.utcoffset () Return utc offset.
- **Timestamp.utctimetuple ()** Return UTC time tuple, compatible with time.localtime().
- Timestamp.weekday () Return the day of the week represented by the date.
- arrays.DatetimeArray (values[, dtype, freq, copy]) Pandas ExtensionArray for tz-naive or tz-aware datetime data.
- DatetimeTZDtype ([unit, tz]) An ExtensionDtype for timezone-aware datetime data.
- Timedelta ([value, unit]) Represents a duration, the difference between two dates or times.
- Timedelta.asm8 Return a numpy timedelta64 array scalar view.
- Timedelta.components Return a components namedtuple-like.
- Timedelta.days Returns the days of the timedelta.
- Timedelta.max -
- Timedelta.microseconds -
- Timedelta.min -
- Timedelta.nanoseconds Return the number of nanoseconds (n), where 0 <\= n < 1 microsecond.
- Timedelta.resolution -
- **Timedelta.seconds** Return the total hours, minutes, and seconds of the timedelta as seconds.
- Timedelta.unit -
- Timedelta.value -
- Timedelta.view (dtype) Array view compatibility.
- Timedelta.as_unit (unit[, round_ok]) Convert the underlying int64 representation to the given unit.
- Timedelta.ceil (freq) Return a new Timedelta ceiled to this resolution.
- Timedelta.floor (freq) Return a new Timedelta floored to this resolution.
- Timedelta.isoformat () Format the Timedelta as ISO 8601 Duration.
- Timedelta.round (freq) Round the Timedelta to the specified resolution.
- Timedelta.to_pytimedelta () Convert a pandas Timedelta object into a python datetime.timedelta object.
- Timedelta.to_timedelta64 () Return a numpy.timedelta64 object with 'ns' precision.
- Timedelta.to_numpy ([dtype, copy]) Convert the Timedelta to a NumPy timedelta64.
- Timedelta.total_seconds () Total seconds in the duration.

- arrays.TimedeltaArray (values[, dtype, freq, ...]) Pandas ExtensionArray for timedelta data.
- Period ([value, freq, ordinal, year, month, ...]) Represents a period of time.
- Period.day Get day of the month that a Period falls on.
- Period.dayofweek Day of the week the period lies in, with Monday\=0 and Sunday\=6.
- **Period.day_of_week** Day of the week the period lies in, with Monday\=0 and Sunday\=6.
- Period.dayofyear Return the day of the year.
- Period.day_of_year Return the day of the year.
- **Period.days_in_month** Get the total number of days in the month that this period falls on.
- **Period.daysinmonth** Get the total number of days of the month that this period falls on.
- Period.end_time Get the Timestamp for the end of the period.
- Period.freq -
- **Period.freqstr** Return a string representation of the frequency.
- **Period.hour** Get the hour of the day component of the Period.
- Period.is_leap_year Return True if the period's year is in a leap year.
- **Period.minute** Get minute of the hour component of the Period.
- Period.month Return the month this Period falls on.
- Period.ordinal -
- Period.quarter Return the quarter this Period falls on.
- **Period.qyear** Fiscal year the Period lies in according to its starting-quarter.
- Period.second Get the second component of the Period.
- **Period.start_time** Get the Timestamp for the start of the period.
- Period.week Get the week of the year on the given Period.
- Period.weekday Day of the week the period lies in, with Monday\=0 and Sunday\=6.
- **Period.weekofyear** Get the week of the year on the given Period.
- Period.year Return the year this Period falls on.
- Period.asfreq (freq[, how]) Convert Period to desired frequency, at the start or end of the interval.
- Period.now (freq) Return the period of now's date.
- **Period.strftime (fmt)** Returns a formatted string representation of the Period .
- Period.to_timestamp ([freq, how]) Return the Timestamp representation of the Period.
- arrays.PeriodArray (values[, dtype, freq, copy]) Pandas ExtensionArray for storing Period data.
- PeriodDtype (freq) An ExtensionDtype for Period data.
- Interval Immutable object implementing an Interval, a bounded slice-like interval.

- Interval.closed String describing the inclusive side the intervals.
- Interval.closed_left Check if the interval is closed on the left side.
- Interval.closed_right Check if the interval is closed on the right side.
- Interval.is_empty Indicates if an interval is empty, meaning it contains no points.
- Interval.left Left bound for the interval.
- Interval.length Return the length of the Interval.
- Interval.mid Return the midpoint of the Interval.
- Interval.open_left Check if the interval is open on the left side.
- Interval.open_right Check if the interval is open on the right side.
- Interval.overlaps (other) Check whether two Interval objects overlap.
- Interval.right Right bound for the interval.
- arrays.IntervalArray (data[, closed, dtype, ...]) Pandas array for interval data that are closed on the same side.
- IntervalDtype ([subtype, closed]) An ExtensionDtype for Interval data.
- arrays.IntegerArray (values, mask[, copy]) Array of integer (optional missing) values.
- Int8Dtype () An ExtensionDtype for int8 integer data.
- Int16Dtype () An ExtensionDtype for int16 integer data.
- Int32Dtype () An ExtensionDtype for int32 integer data.
- Int64Dtype () An ExtensionDtype for int64 integer data.
- UInt8Dtype () An ExtensionDtype for uint8 integer data.
- UInt16Dtype () An ExtensionDtype for uint16 integer data.
- UInt32Dtype () An ExtensionDtype for uint32 integer data.
- UInt64Dtype () An ExtensionDtype for uint64 integer data.
- arrays.FloatingArray (values, mask[, copy]) Array of floating (optional missing) values.
- Float32Dtype () An ExtensionDtype for float32 data.
- Float64Dtype () An ExtensionDtype for float64 data.
- CategoricalDtype ([categories, ordered]) Type for categorical data with the categories and orderedness.
- CategoricalDtype.categories An Index containing the unique categories allowed.
- CategoricalDtype.ordered Whether the categories have an ordered relationship.
- Categorical (values[, categories, ordered, ...]) Represent a categorical variable in classic R / S-plus fashion.
- Categorical.from_codes (codes[, categories, ...]) Make a Categorical type from codes and categories or dtype.
- Categorical.dtype The CategoricalDtype for this instance.
- Categorical.categories The categories of this categorical.
- Categorical.ordered Whether the categories have an ordered relationship.
- Categorical.codes The category codes of this categorical index.

- Categorical.__array__ ([dtype, copy]) The numpy array interface.
- arrays.SparseArray (data[, sparse_index, ...]) An ExtensionArray for storing sparse data.
- SparseDtype ([dtype, fill_value]) Dtype for data stored in SparseArray .
- arrays.StringArray (values[, copy]) Extension array for string data.
- arrays.ArrowStringArray (values) Extension array for string data in a pyarrow.ChunkedArray .
- StringDtype ([storage]) Extension dtype for string data.
- arrays.BooleanArray (values, mask[, copy]) Array of boolean (True/False) data with missing values.
- BooleanDtype () Extension dtype for boolean data.

Utilities

- api.types.union_categoricals (to_union[, ...]) Combine list-like of Categorical-like, unioning categories.
- api.types.infer_dtype (value[, skipna]) Return a string label of the type of a scalar or list-like of values.
- api.types.pandas_dtype (dtype) Convert input into a pandas only dtype object or a numpy dtype object.
- api.types.is_any_real_numeric_dtype (arr_or_dtype) Check whether the provided array or dtype is of a real number dtype.
- api.types.is_bool_dtype (arr_or_dtype) Check whether the provided array or dtype is of a boolean dtype.
- api.types.is_categorical_dtype (arr_or_dtype) (DEPRECATED) Check whether an array-like or dtype is of the Categorical dtype.
- api.types.is_complex_dtype (arr_or_dtype) Check whether the provided array or dtype is of a complex dtype.
- api.types.is_datetime64_any_dtype (arr_or_dtype) Check whether the provided array or dtype is of the datetime64 dtype.
- api.types.is_datetime64_dtype (arr_or_dtype) Check whether an array-like or dtype is of the datetime64 dtype.
- api.types.is_datetime64_ns_dtype (arr_or_dtype) Check whether the provided array or dtype is of the datetime64[ns] dtype.
- api.types.is_datetime64tz_dtype (arr_or_dtype) (DEPRECATED)
 Check whether an array-like or dtype is of a DatetimeTZDtype dtype.
- api.types.is_extension_array_dtype (arr_or_dtype) Check if an object is a pandas extension array type.
- api.types.is_float_dtype (arr_or_dtype) Check whether the provided array or dtype is of a float dtype.
- api.types.is_int64_dtype (arr_or_dtype) (DEPRECATED) Check whether the provided array or dtype is of the int64 dtype.

- api.types.is_integer_dtype (arr_or_dtype) Check whether the provided array or dtype is of an integer dtype.
- api.types.is_interval_dtype (arr_or_dtype) (DEPRECATED)
 Check whether an array-like or dtype is of the Interval dtype.
- api.types.is_numeric_dtype (arr_or_dtype) Check whether the provided array or dtype is of a numeric dtype.
- api.types.is_object_dtype (arr_or_dtype) Check whether an array-like or dtype is of the object dtype.
- api.types.is_period_dtype (arr_or_dtype) (DEPRECATED) Check whether an array-like or dtype is of the Period dtype.
- api.types.is_signed_integer_dtype (arr_or_dtype) Check whether the provided array or dtype is of a signed integer dtype.
- api.types.is_string_dtype (arr_or_dtype) Check whether the provided array or dtype is of the string dtype.
- api.types.is_timedelta64_dtype (arr_or_dtype) Check whether an array-like or dtype is of the timedelta64 dtype.
- api.types.is_timedelta64_ns_dtype (arr_or_dtype) Check whether the provided array or dtype is of the timedelta64[ns] dtype.
- api.types.is_unsigned_integer_dtype (arr_or_dtype) Check whether the provided array or dtype is of an unsigned integer dtype.
- api.types.is_sparse (arr) (DEPRECATED) Check whether an array-like is a 1-D pandas sparse array.
- api.types.is_dict_like (obj) Check if the object is dictlike.
- api.types.is_file_like (obj) Check if the object is a file-like object.
- api.types.is_list_like (obj[, allow_sets]) Check if the object is list-like.
- api.types.is_named_tuple (obj) Check if the object is a named tuple.
- api.types.is_iterator (obj) Check if the object is an iterator.
- api.types.is_bool (obj) Return True if given object is boolean.
- api.types.is_complex (obj) Return True if given object is complex.
- api.types.is_float (obj) Return True if given object is float.
- api.types.is_hashable (obj) Return True if hash(obj) will succeed, False otherwise.
- api.types.is_integer (obj) Return True if given object is integer.
- api.types.is_interval (obj) -
- api.types.is_number (obj) Check if the object is a number.
- api.types.is_re (obj) Check if the object is a regex pattern instance.
- api.types.is_re_compilable (obj) Check if the object can be compiled into a regex pattern instance.

• api.types.is_scalar (val) - Return True if given object is scalar.

Index objects

Index

- Index ([data, dtype, copy, name, tupleize_cols]) Immutable sequence used for indexing and alignment.
- Index.values Return an array representing the data in the Index.
- Index.is_monotonic_increasing Return a boolean if the values are equal or increasing.
- Index.is_monotonic_decreasing Return a boolean if the values are equal or decreasing.
- Index.is_unique Return if the index has unique values.
- Index.has_duplicates Check if the Index has duplicate values.
- Index.hasnans Return True if there are any NaNs.
- Index.dtype Return the dtype object of the underlying data.
- Index.inferred_type Return a string of the type inferred from the values.
- Index.shape Return a tuple of the shape of the underlying data.
- Index.name Return Index or MultiIndex name.
- Index.names -
- Index.nbytes Return the number of bytes in the underlying data.
- Index.ndim Number of dimensions of the underlying data, by definition 1.
- Index.size Return the number of elements in the underlying data.
- Index.empty -
- Index.T Return the transpose, which is by definition self.
- Index.memory_usage ([deep]) Memory usage of the values.
- Index.all (*args, **kwargs) Return whether all elements are Truthy.
- Index.any (*args, **kwargs) Return whether any element is Truthy.
- Index.argmin ([axis, skipna]) Return int position of the smallest value in the Series.
- Index.argmax ([axis, skipna]) Return int position of the largest value in the Series.
- Index.copy ([name, deep]) Make a copy of this object.
- Index.delete (loc) Make new Index with passed location(-s) deleted.
- Index.drop (labels[, errors]) Make new Index with passed list of labels deleted.
- Index.drop_duplicates (*[, keep]) Return Index with duplicate values removed.
- Index.duplicated ([keep]) Indicate duplicate index values.

- Index.equals (other) Determine if two Index object are equal.
- Index.factorize ([sort, use_na_sentinel]) Encode the object as an enumerated type or categorical variable.
- Index.identical (other) Similar to equals, but checks that object attributes and types are also equal.
- Index.insert (loc, item) Make new Index inserting new item at location.
- Index.is_ (other) More flexible, faster check like is but that works through views.
- Index.is_boolean () (DEPRECATED) Check if the Index only consists of booleans.
- Index.is_categorical () (DEPRECATED) Check if the Index holds categorical data.
- Index.is_floating () (DEPRECATED) Check if the Index is a floating type.
- Index.is_integer () (DEPRECATED) Check if the Index only consists of integers.
- Index.is_interval () (DEPRECATED) Check if the Index holds Interval objects.
- Index.is_numeric () (DEPRECATED) Check if the Index only consists of numeric data.
- Index.is_object () (DEPRECATED) Check if the Index is of the object dtype.
- Index.min ([axis, skipna]) Return the minimum value of the Index.
- Index.max ([axis, skipna]) Return the maximum value of the Index.
- Index.reindex (target[, method, level, ...]) Create index with target's values.
- Index.rename (name, *[, inplace]) Alter Index or MultiIndex name.
- Index.repeat (repeats[, axis]) Repeat elements of a Index.
- Index.where (cond[, other]) Replace values where the condition is False.
- Index.take (indices[, axis, allow_fill, ...]) Return a new Index of the values selected by the indices.
- Index.putmask (mask, value) Return a new Index of the values set with the mask.
- Index.unique ([level]) Return unique values in the index.
- Index.nunique ([dropna]) Return number of unique elements in the object.
- Index.value_counts ([normalize, sort, ...]) Return a Series containing counts of unique values.
- Index.set_names (names, *[, level, inplace]) Set Index or MultiIndex name.
- Index.droplevel ([level]) Return index with requested level(s) removed.
- Index.fillna ([value, downcast]) Fill NA/NaN values with the specified value.
- Index.dropna ([how]) Return Index without NA/NaN values.
- Index.isna () Detect missing values.
- Index.notna () Detect existing (non-missing) values.

- Index.astype (dtype[, copy]) Create an Index with values cast to dtypes.
- Index.item () Return the first element of the underlying data as a Python scalar.
- Index.map (mapper[, na_action]) Map values using an input mapping or function.
- Index.ravel ([order]) Return a view on self.
- Index.to_list () Return a list of the values.
- Index.to_series ([index, name]) Create a Series with both index and values equal to the index keys.
- Index.to_frame ([index, name]) Create a DataFrame with a column containing the Index.
- Index.view ([cls]) -
- Index.argsort (*args, **kwargs) Return the integer indices that would sort the index.
- Index.searchsorted (value[, side, sorter]) Find indices where elements should be inserted to maintain order.
- Index.sort_values (*[, return_indexer, ...]) Return a sorted copy of the index.
- Index.shift ([periods, freq]) Shift index by desired number of time frequency increments.
- Index.append (other) Append a collection of Index options together.
- Index.join (other, *[, how, level, ...]) Compute join_index and indexers to conform data structures to the new index.
- Index.intersection (other[, sort]) Form the intersection of two Index objects.
- Index.union (other[, sort]) Form the union of two Index objects.
- Index.difference (other[, sort]) Return a new Index with elements of index not in other .
- Index.symmetric_difference (other[, ...]) Compute the symmetric difference of two Index objects.
- Index.asof (label) Return the label from the index, or, if not present, the previous one.
- Index.asof_locs (where, mask) Return the locations (indices) of labels in the index.
- Index.get_indexer (target[, method, limit, ...]) Compute indexer and mask for new index given the current index.
- Index.get_indexer_for (target) Guaranteed return of an indexer even when non-unique.
- Index.get_indexer_non_unique (target) Compute indexer and mask for new index given the current index.
- Index.get_level_values (level) Return an Index of values for requested level.
- Index.get_loc (key) Get integer location, slice or boolean mask for requested label.
- Index.get_slice_bound (label, side) Calculate slice bound that corresponds to given label.
- Index.isin (values[, level]) Return a boolean array where the index values are in values .
- Index.slice_indexer ([start, end, step]) Compute the slice indexer for input labels and step.

• Index.slice_locs ([start, end, step]) - Compute slice locations for input labels.

Numeric Index

- RangeIndex ([start, stop, step, dtype, copy, ...]) Immutable Index implementing a monotonic integer range.
- RangeIndex.start The value of the start parameter (0 if this was not supplied).
- RangeIndex.stop The value of the stop parameter.
- RangeIndex.step The value of the step parameter (1 if this was not supplied).
- RangeIndex.from_range (data[, name, dtype]) Create pandas.RangeIndex from a range object.

CategoricalIndex

- CategoricalIndex ([data, categories, ...]) Index based on an underlying Categorical .
- CategoricalIndex.codes The category codes of this categorical index.
- CategoricalIndex.categories The categories of this categorical.
- CategoricalIndex.ordered Whether the categories have an ordered relationship.
- CategoricalIndex.rename_categories (*args, ...) Rename categories.
- CategoricalIndex.reorder_categories (*args, ...) Reorder categories as specified in new categories.
- CategoricalIndex.add_categories (*args, **kwargs) Add new categories.
- CategoricalIndex.remove_categories (*args, ...) Remove the specified categories.
- CategoricalIndex.remove_unused_categories (...) Remove categories which are not used.
- CategoricalIndex.set_categories (*args, **kwargs) Set the categories to the specified new categories.
- CategoricalIndex.as_ordered (*args, **kwargs) Set the Categorical to be ordered.
- CategoricalIndex.as_unordered (*args, **kwargs) Set the Categorical to be unordered.
- CategoricalIndex.map (mapper[, na_action]) Map values using input an input mapping or function.
- CategoricalIndex.equals (other) Determine if two CategoricalIndex objects contain the same elements.

IntervalIndex

- IntervalIndex (data[, closed, dtype, copy, ...]) Immutable index of intervals that are closed on the same side.
- IntervalIndex.from_arrays (left, right[, ...]) Construct from two arrays defining the left and right bounds.
- IntervalIndex.from_tuples (data[, closed, ...]) Construct an IntervalIndex from an array-like of tuples.
- IntervalIndex.from_breaks (breaks[, closed, ...]) Construct an IntervalIndex from an array of splits.
- IntervalIndex.left -
- IntervalIndex.right -
- IntervalIndex.mid -
- IntervalIndex.closed String describing the inclusive side the intervals.
- IntervalIndex.length -
- IntervalIndex.values Return an array representing the data in the Index.
- IntervalIndex.is_empty Indicates if an interval is empty, meaning it contains no points.
- IntervalIndex.is_non_overlapping_monotonic Return a boolean whether the IntervalArray is non-overlapping and monotonic.
- IntervalIndex.is_overlapping Return True if the IntervalIndex has overlapping intervals, else False.
- IntervalIndex.get_loc (key) Get integer location, slice or boolean mask for requested label.
- IntervalIndex.get_indexer (target[, method, ...]) Compute indexer and mask for new index given the current index.
- IntervalIndex.set_closed (*args, **kwargs) Return an identical IntervalArray closed on the specified side.
- IntervalIndex.contains (*args, **kwargs) Check elementwise if the Intervals contain the value.
- IntervalIndex.overlaps (*args, **kwargs) Check elementwise if an Interval overlaps the values in the IntervalArray.
- IntervalIndex.to_tuples (*args, **kwargs) Return an ndarray (if self is IntervalArray) or Index (if self is IntervalIndex) of tuples of the form (left, right).

MultiIndex

- MultiIndex ([levels, codes, sortorder, ...]) A multi-level, or hierarchical, index object for pandas objects.
- MultiIndex.from_arrays (arrays[, sortorder, ...]) Convert arrays to MultiIndex.
- MultiIndex.from_tuples (tuples[, sortorder, ...]) Convert list of tuples to MultiIndex.
- MultiIndex.from_product (iterables[, ...]) Make a MultiIndex from the cartesian product of multiple iterables.

- MultiIndex.from_frame (df[, sortorder, names]) Make a MultiIndex from a DataFrame.
- MultiIndex.names Names of levels in MultiIndex.
- MultiIndex.levels Levels of the MultiIndex.
- MultiIndex.codes -
- MultiIndex.nlevels Integer number of levels in this MultiIndex.
- MultiIndex.levshape A tuple with the length of each level.
- MultiIndex.dtypes Return the dtypes as a Series for the underlying MultiIndex.
- MultiIndex.set_levels (levels, *[, level, ...]) Set new levels on MultiIndex.
- MultiIndex.set_codes (codes, *[, level, ...]) Set new codes on MultiIndex.
- MultiIndex.to_flat_index () Convert a MultiIndex to an Index of Tuples containing the level values.
- MultiIndex.to_frame ([index, name, ...]) Create a DataFrame with the levels of the MultiIndex as columns.
- MultiIndex.sortlevel ([level, ascending, ...]) Sort MultiIndex at the requested level.
- MultiIndex.droplevel ([level]) Return index with requested level(s) removed.
- MultiIndex.swaplevel ([i, j]) Swap level i with level j.
- MultiIndex.reorder_levels (order) Rearrange levels using input order.
- MultiIndex.remove_unused_levels () Create new MultiIndex from current that removes unused levels.
- MultiIndex.drop (codes[, level, errors]) Make a new pandas.MultiIndex with the passed list of codes deleted.
- MultiIndex.copy ([names, deep, name]) Make a copy of this object.
- MultiIndex.append (other) Append a collection of Index options together.
- MultiIndex.truncate ([before, after]) Slice index between two labels / tuples, return new MultiIndex.
- MultiIndex.get_loc (key) Get location for a label or a tuple of labels.
- MultiIndex.get_locs (seq) Get location for a sequence of labels.
- MultiIndex.get_loc_level (key[, level, ...]) Get location and sliced index for requested label(s)/level(s).
- MultiIndex.get_indexer (target[, method, ...]) Compute indexer and mask for new index given the current index.
- MultiIndex.get_level_values (level) Return vector of label values for requested level.
- IndexSlice Create an object to more easily perform multiindex slicing.

DatetimeIndex

• DatetimeIndex ([data, freq, tz, normalize, ...]) - Immutable ndarray-like of datetime64 data.

- DatetimeIndex.year The year of the datetime.
- DatetimeIndex.month The month as January\=1, December\=12.
- DatetimeIndex.day The day of the datetime.
- DatetimeIndex.hour The hours of the datetime.
- DatetimeIndex.minute The minutes of the datetime.
- DatetimeIndex.second The seconds of the datetime.
- DatetimeIndex.microsecond The microseconds of the datetime.
- DatetimeIndex.nanosecond The nanoseconds of the datetime.
- **DatetimeIndex.date** Returns numpy array of python datetime.date objects.
- **DatetimeIndex.time** Returns numpy array of datetime.time objects.
- **DatetimeIndex.timetz** Returns numpy array of datetime.time objects with timezones.
- DatetimeIndex.dayofyear The ordinal day of the year.
- DatetimeIndex.day_of_year The ordinal day of the year.
- DatetimeIndex.dayofweek The day of the week with Monday\=0, Sunday\=6.
- DatetimeIndex.day_of_week The day of the week with Monday\=0, Sunday\=6.
- DatetimeIndex.weekday The day of the week with Monday\=0, Sunday\=6.
- DatetimeIndex.quarter The quarter of the date.
- DatetimeIndex.tz Return the timezone.
- DatetimeIndex.freq -
- DatetimeIndex.freqstr Return the frequency object as a string if it's set, otherwise None.
- DatetimeIndex.is_month_start Indicates whether the date is the first day of the month.
- DatetimeIndex.is_month_end Indicates whether the date is the last day of the month.
- DatetimeIndex.is_quarter_start Indicator for whether the date is the first day of a quarter.
- **DatetimeIndex.is_quarter_end** Indicator for whether the date is the last day of a quarter.
- DatetimeIndex.is_year_start Indicate whether the date is the first day of a year.
- DatetimeIndex.is_year_end Indicate whether the date is the last day of the year.
- DatetimeIndex.is_leap_year Boolean indicator if the date belongs to a leap year.
- DatetimeIndex.inferred_freq Tries to return a string representing a frequency generated by infer_freq.
- DatetimeIndex.indexer_at_time (time[, asof]) Return index locations of values at particular time of day.
- DatetimeIndex.indexer_between_time (...[, ...]) Return index locations of values between particular times of day.
- DatetimeIndex.normalize (*args, **kwargs) Convert times to midnight.
- DatetimeIndex.strftime (date_format) Convert to Index using specified date_format.
- DatetimeIndex.snap ([freq]) Snap time stamps to nearest occurring frequency.

- DatetimeIndex.tz_convert (tz) Convert tz-aware Datetime Array/Index from one time zone to another.
- DatetimeIndex.tz_localize (tz[, ambiguous, ...]) Localize tz-naive Datetime Array/Index to tz-aware Datetime Array/Index.
- DatetimeIndex.round (*args, **kwargs) Perform round operation on the data to the specified freq .
- DatetimeIndex.floor (*args, **kwargs) Perform floor operation on the data to the specified freq .
- DatetimeIndex.ceil (*args, **kwargs) Perform ceil operation on the data to the specified freq .
- DatetimeIndex.month_name (*args, **kwargs) Return the month names with specified locale.
- DatetimeIndex.day_name (*args, **kwargs) Return the day names with specified locale.
- DatetimeIndex.as_unit (*args, **kwargs) Convert to a dtype with the given unit resolution.
- DatetimeIndex.to_period (*args, **kwargs) Cast to PeriodArray/PeriodIndex at a particular frequency.
- DatetimeIndex.to_pydatetime (*args, **kwargs) Return an ndarray of datetime.datetime objects.
- DatetimeIndex.to_series ([index, name]) Create a Series with both index and values equal to the index keys.
- DatetimeIndex.to_frame ([index, name]) Create a DataFrame with a column containing the Index.
- DatetimeIndex.mean (*[, skipna, axis]) Return the mean value of the Array.
- DatetimeIndex.std (*args, **kwargs) Return sample standard deviation over requested axis.

TimedeltaIndex

- TimedeltaIndex ([data, unit, freq, closed, ...]) Immutable Index of timedelta64 data.
- TimedeltaIndex.days Number of days for each element.
- TimedeltaIndex.seconds Number of seconds (>\= 0 and less than 1 day) for each element.
- TimedeltaIndex.microseconds Number of microseconds (>\= 0 and less than 1 second) for each element.
- TimedeltaIndex.nanoseconds Number of nanoseconds (>\= 0 and less than 1 microsecond) for each element.
- TimedeltaIndex.components Return a DataFrame of the individual resolution components of the Timedeltas.
- **TimedeltaIndex.inferred_freq** Tries to return a string representing a frequency generated by infer_freq.
- TimedeltaIndex.as_unit (unit) Convert to a dtype with the given unit resolution.
- TimedeltaIndex.to_pytimedelta (*args, **kwargs) Return an ndarray of datetime.timedelta objects.
- TimedeltaIndex.to_series ([index, name]) Create a Series with both index and values equal to the index keys.

- TimedeltaIndex.round (*args, **kwargs) Perform round operation on the data to the specified freq .
- TimedeltaIndex.floor (*args, **kwargs) Perform floor operation on the data to the specified freg.
- TimedeltaIndex.ceil (*args, **kwargs) Perform ceil operation on the data to the specified freg.
- TimedeltaIndex.to_frame ([index, name]) Create a DataFrame with a column containing the Index.
- TimedeltaIndex.mean (*[, skipna, axis]) Return the mean value of the Array.

PeriodIndex

- PeriodIndex ([data, ordinal, freq, dtype, ...]) Immutable ndarray holding ordinal values indicating regular periods in time.
- PeriodIndex.day The days of the period.
- PeriodIndex.dayofweek The day of the week with Monday\=0, Sunday=6.
- PeriodIndex.day_of_week The day of the week with Monday\=0, Sunday=6.
- PeriodIndex.dayofyear The ordinal day of the year.
- PeriodIndex.day_of_year The ordinal day of the year.
- PeriodIndex.days_in_month The number of days in the month.
- PeriodIndex.daysinmonth The number of days in the month.
- PeriodIndex.end_time Get the Timestamp for the end of the period.
- PeriodIndex.freq -
- PeriodIndex.fregstr Return the frequency object as a string if it's set, otherwise None.
- PeriodIndex.hour The hour of the period.
- PeriodIndex.is_leap_year Logical indicating if the date belongs to a leap year.
- PeriodIndex.minute The minute of the period.
- PeriodIndex.month The month as January\=1, December\=12.
- PeriodIndex.quarter The quarter of the date.
- PeriodIndex.gyear -
- PeriodIndex.second The second of the period.
- PeriodIndex.start_time Get the Timestamp for the start of the period.
- PeriodIndex.week The week ordinal of the year.
- PeriodIndex.weekday The day of the week with Monday \= 0, Sunday=6.
- PeriodIndex.weekofyear The week ordinal of the year.
- PeriodIndex.year The year of the period.
- PeriodIndex.asfreq ([freq, how]) Convert the PeriodArray to
- the specified frequency freq .
 PeriodIndex.strftime (*args, **kwargs) Convert to Index using specified date_format.
- PeriodIndex.to_timestamp ([freq, how]) Cast to DatetimeArray/Index.

- PeriodIndex.from_fields (*[, year, quarter, ...]) -
- PeriodIndex.from_ordinals (ordinals, *, freq) -

Date offsets

DateOffset

- **DateOffset** Standard kind of date increment used for a date range.
- DateOffset.freqstr Return a string representing the frequency.
- DateOffset.kwds Return a dict of extra parameters for the offset.
- DateOffset.name Return a string representing the base frequency.
- DateOffset.nanos -
- DateOffset.normalize -
- DateOffset.rule_code -
- DateOffset.n -
- DateOffset.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- DateOffset.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- DateOffset.copy () Return a copy of the frequency.
- DateOffset.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- DateOffset.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- DateOffset.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- DateOffset.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- DateOffset.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- DateOffset.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- DateOffset.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- DateOffset.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

BusinessDay

- **BusinessDay** DateOffset subclass representing possibly n business days.
- BDay alias of BusinessDay
- BusinessDay.freqstr Return a string representing the frequency.

- BusinessDay.kwds Return a dict of extra parameters for the offset.
- BusinessDay.name Return a string representing the base frequency.
- BusinessDay.nanos -
- BusinessDay.normalize -
- BusinessDay.rule_code -
- BusinessDay.n -
- BusinessDay.weekmask -
- BusinessDay.holidays -
- BusinessDay.calendar -
- BusinessDay.copy () Return a copy of the frequency.
- BusinessDay.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- BusinessDay.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- BusinessDay.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- BusinessDay.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- BusinessDay.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- BusinessDay.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- BusinessDay.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- BusinessDay.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

BusinessHour

- BusinessHour DateOffset subclass representing possibly n business hours.
- BusinessHour.freqstr Return a string representing the frequency.
- BusinessHour.kwds Return a dict of extra parameters for the offset.
- BusinessHour.name Return a string representing the base frequency.
- BusinessHour.nanos -
- BusinessHour.normalize -
- BusinessHour.rule_code -
- BusinessHour.n -
- BusinessHour.start -
- BusinessHour.end -
- BusinessHour.weekmask -
- BusinessHour.holidays -
- BusinessHour.calendar -
- BusinessHour.copy () Return a copy of the frequency.
- BusinessHour.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).

- BusinessHour.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- BusinessHour.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- BusinessHour.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- BusinessHour.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- BusinessHour.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- BusinessHour.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- BusinessHour.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

CustomBusinessDay

- **CustomBusinessDay** DateOffset subclass representing possibly n custom business days.
- CDay alias of CustomBusinessDay
- **CustomBusinessDay.freqstr** Return a string representing the frequency.
- CustomBusinessDay.kwds Return a dict of extra parameters for the offset.
- **CustomBusinessDay.name** Return a string representing the base frequency.
- CustomBusinessDay.nanos -
- CustomBusinessDay.normalize -
- CustomBusinessDay.rule_code -
- CustomBusinessDay.n -
- CustomBusinessDay.weekmask -
- CustomBusinessDay.calendar -
- CustomBusinessDay.holidays -
- CustomBusinessDay.copy () Return a copy of the frequency.
- CustomBusinessDay.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- CustomBusinessDay.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- CustomBusinessDay.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- CustomBusinessDay.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- CustomBusinessDay.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- CustomBusinessDay.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- CustomBusinessDay.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- CustomBusinessDay.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

CustomBusinessHour

- **CustomBusinessHour** DateOffset subclass representing possibly n custom business days.
- **CustomBusinessHour.freqstr** Return a string representing the frequency.
- CustomBusinessHour.kwds Return a dict of extra parameters for the offset.
- **CustomBusinessHour.name** Return a string representing the base frequency.
- CustomBusinessHour.nanos -
- CustomBusinessHour.normalize -
- CustomBusinessHour.rule code -
- CustomBusinessHour.n -
- CustomBusinessHour.weekmask -
- CustomBusinessHour.calendar -
- CustomBusinessHour.holidays -
- CustomBusinessHour.start -
- CustomBusinessHour.end -
- CustomBusinessHour.copy () Return a copy of the frequency.
- CustomBusinessHour.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- CustomBusinessHour.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- CustomBusinessHour.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- CustomBusinessHour.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- CustomBusinessHour.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- CustomBusinessHour.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- CustomBusinessHour.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- CustomBusinessHour.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

MonthEnd

- MonthEnd DateOffset of one month end.
- MonthEnd.freqstr Return a string representing the frequency.
- MonthEnd.kwds Return a dict of extra parameters for the offset.
- MonthEnd.name Return a string representing the base frequency.
- MonthEnd.nanos -
- MonthEnd.normalize -
- MonthEnd.rule_code -

- MonthEnd.n -
- MonthEnd.copy () Return a copy of the frequency.
- MonthEnd.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- MonthEnd.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- MonthEnd.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- MonthEnd.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- MonthEnd.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- MonthEnd.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- MonthEnd.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- MonthEnd.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

MonthBegin

- MonthBegin DateOffset of one month at beginning.
- MonthBegin.freqstr Return a string representing the frequency.
- MonthBegin.kwds Return a dict of extra parameters for the offset.
- MonthBegin.name Return a string representing the base frequency.
- MonthBegin.nanos -
- MonthBegin.normalize -
- MonthBegin.rule code -
- MonthBegin.n -
- MonthBegin.copy () Return a copy of the frequency.
- MonthBegin.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- MonthBegin.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- MonthBegin.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- MonthBegin.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- MonthBegin.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- MonthBegin.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- MonthBegin.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- MonthBegin.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

BusinessMonthEnd

- BusinessMonthEnd DateOffset increments between the last business day of the month.
- BMonthEnd alias of BusinessMonthEnd
- BusinessMonthEnd.freqstr Return a string representing the frequency.
- BusinessMonthEnd.kwds Return a dict of extra parameters for the offset.
- BusinessMonthEnd.name Return a string representing the base frequency.
- BusinessMonthEnd.nanos -
- BusinessMonthEnd.normalize -
- BusinessMonthEnd.rule code -
- BusinessMonthEnd.n -
- BusinessMonthEnd.copy () Return a copy of the frequency.
- BusinessMonthEnd.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- BusinessMonthEnd.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- BusinessMonthEnd.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- BusinessMonthEnd.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- BusinessMonthEnd.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- BusinessMonthEnd.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- BusinessMonthEnd.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- BusinessMonthEnd.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

BusinessMonthBegin

- BusinessMonthBegin DateOffset of one month at the first business day.
- BMonthBegin alias of BusinessMonthBegin
- BusinessMonthBegin.freqstr Return a string representing the frequency.
- BusinessMonthBegin.kwds Return a dict of extra parameters for the offset.
- BusinessMonthBegin.name Return a string representing the base frequency.
- BusinessMonthBegin.nanos -
- BusinessMonthBegin.normalize -
- BusinessMonthBegin.rule code -
- BusinessMonthBegin.n -
- BusinessMonthBegin.copy () Return a copy of the frequency.

- BusinessMonthBegin.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- BusinessMonthBegin.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- BusinessMonthBegin.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- BusinessMonthBegin.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- BusinessMonthBegin.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- BusinessMonthBegin.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- BusinessMonthBegin.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- BusinessMonthBegin.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

CustomBusinessMonthEnd

- **CustomBusinessMonthEnd** DateOffset subclass representing custom business month(s).
- CBMonthEnd alias of CustomBusinessMonthEnd
- **CustomBusinessMonthEnd.freqstr** Return a string representing the frequency.
- **CustomBusinessMonthEnd.kwds** Return a dict of extra parameters for the offset.
- CustomBusinessMonthEnd.m_offset -
- **CustomBusinessMonthEnd.name** Return a string representing the base frequency.
- CustomBusinessMonthEnd.nanos -
- CustomBusinessMonthEnd.normalize -
- CustomBusinessMonthEnd.rule code -
- CustomBusinessMonthEnd.n -
- CustomBusinessMonthEnd.weekmask -
- CustomBusinessMonthEnd.calendar -
- CustomBusinessMonthEnd.holidays -
- CustomBusinessMonthEnd.copy () Return a copy of the frequency.
- CustomBusinessMonthEnd.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- CustomBusinessMonthEnd.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- CustomBusinessMonthEnd.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- CustomBusinessMonthEnd.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- CustomBusinessMonthEnd.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- CustomBusinessMonthEnd.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.

- CustomBusinessMonthEnd.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- CustomBusinessMonthEnd.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

CustomBusinessMonthBegin

- **CustomBusinessMonthBegin** DateOffset subclass representing custom business month(s).
- CBMonthBegin alias of CustomBusinessMonthBegin
- **CustomBusinessMonthBegin.freqstr** Return a string representing the frequency.
- **CustomBusinessMonthBegin.kwds** Return a dict of extra parameters for the offset.
- CustomBusinessMonthBegin.m_offset -
- **CustomBusinessMonthBegin.name** Return a string representing the base frequency.
- CustomBusinessMonthBegin.nanos -
- CustomBusinessMonthBegin.normalize -
- CustomBusinessMonthBegin.rule_code -
- CustomBusinessMonthBegin.n -
- CustomBusinessMonthBegin.weekmask -
- CustomBusinessMonthBegin.calendar -
- CustomBusinessMonthBegin.holidays -
- CustomBusinessMonthBegin.copy () Return a copy of the frequency.
- CustomBusinessMonthBegin.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- CustomBusinessMonthBegin.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- CustomBusinessMonthBegin.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- CustomBusinessMonthBegin.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- CustomBusinessMonthBegin.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- CustomBusinessMonthBegin.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- CustomBusinessMonthBegin.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- CustomBusinessMonthBegin.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

SemiMonthEnd

• **SemiMonthEnd** - Two DateOffset's per month repeating on the last day of the month & day_of_month.

- **SemiMonthEnd.freqstr** Return a string representing the frequency.
- **SemiMonthEnd.kwds** Return a dict of extra parameters for the offset.
- **SemiMonthEnd.name** Return a string representing the base frequency.
- SemiMonthEnd.nanos -
- SemiMonthEnd.normalize -
- SemiMonthEnd.rule_code -
- SemiMonthEnd.n -
- SemiMonthEnd.day_of_month -
- SemiMonthEnd.copy () Return a copy of the frequency.
- SemiMonthEnd.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- SemiMonthEnd.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- SemiMonthEnd.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- SemiMonthEnd.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- SemiMonthEnd.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- SemiMonthEnd.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- SemiMonthEnd.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- SemiMonthEnd.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

SemiMonthBegin

- **SemiMonthBegin** Two DateOffset's per month repeating on the first day of the month & day_of_month.
- **SemiMonthBegin.freqstr** Return a string representing the frequency.
- **SemiMonthBegin.kwds** Return a dict of extra parameters for the offset.
- **SemiMonthBegin.name** Return a string representing the base frequency.
- SemiMonthBegin.nanos -
- SemiMonthBegin.normalize -
- SemiMonthBegin.rule_code -
- SemiMonthBegin.n -
- SemiMonthBegin.day_of_month -
- SemiMonthBegin.copy () Return a copy of the frequency.
- **SemiMonthBegin.is_anchored ()** (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- SemiMonthBegin.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- SemiMonthBegin.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.

- SemiMonthBegin.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- SemiMonthBegin.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- SemiMonthBegin.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- **SemiMonthBegin.is_year_start (ts)** Return boolean whether a timestamp occurs on the year start.
- SemiMonthBegin.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

Week

- Week Weekly offset.
- Week.fregstr Return a string representing the frequency.
- Week.kwds Return a dict of extra parameters for the offset.
- Week.name Return a string representing the base frequency.
- Week.nanos -
- Week.normalize -
- Week.rule code -
- Week.n -
- Week.weekday -
- Week.copy () Return a copy of the frequency.
- Week.is_anchored () Return boolean whether the frequency is a unit frequency (n\=1).
- Week.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- Week.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- Week.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- Week.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- Week.is_quarter_end (ts) Return boolean whether a timestamp occurs on the guarter end.
- Week.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- Week.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

WeekOfMonth

- WeekOfMonth Describes monthly dates like "the Tuesday of the 2nd week of each month".
- WeekOfMonth.freqstr Return a string representing the frequency.
- WeekOfMonth.kwds Return a dict of extra parameters for the offset.

- WeekOfMonth.name Return a string representing the base frequency.
- WeekOfMonth.nanos -
- WeekOfMonth.normalize -
- WeekOfMonth.rule_code -
- WeekOfMonth.n -
- WeekOfMonth.week -
- WeekOfMonth.copy () Return a copy of the frequency.
- WeekOfMonth.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- WeekOfMonth.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- WeekOfMonth.weekday -
- WeekOfMonth.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- WeekOfMonth.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- WeekOfMonth.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- WeekOfMonth.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- WeekOfMonth.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- WeekOfMonth.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

LastWeekOfMonth

- LastWeekOfMonth Describes monthly dates in last week of month.
- LastWeekOfMonth.freqstr Return a string representing the frequency.
- LastWeekOfMonth.kwds Return a dict of extra parameters for the offset.
- LastWeekOfMonth.name Return a string representing the base frequency.
- LastWeekOfMonth.nanos -
- LastWeekOfMonth.normalize -
- LastWeekOfMonth.rule code -
- LastWeekOfMonth.n -
- LastWeekOfMonth.weekday -
- LastWeekOfMonth.week -
- LastWeekOfMonth.copy () Return a copy of the frequency.
- LastWeekOfMonth.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- LastWeekOfMonth.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- LastWeekOfMonth.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- LastWeekOfMonth.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.

- LastWeekOfMonth.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- LastWeekOfMonth.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- LastWeekOfMonth.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- LastWeekOfMonth.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

BQuarterEnd

- **BQuarterEnd** DateOffset increments between the last business day of each Quarter.
- **BQuarterEnd.freqstr** Return a string representing the frequency.
- BQuarterEnd.kwds Return a dict of extra parameters for the offset.
- **BQuarterEnd.name** Return a string representing the base frequency.
- BQuarterEnd.nanos -
- BOuarterEnd.normalize -
- BQuarterEnd.rule_code -
- BQuarterEnd.n -
- BQuarterEnd.startingMonth -
- BQuarterEnd.copy () Return a copy of the frequency.
- BQuarterEnd.is_anchored () Return boolean whether the frequency is a unit frequency (n\=1).
- BQuarterEnd.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- BQuarterEnd.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- BQuarterEnd.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- BQuarterEnd.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- BQuarterEnd.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- BQuarterEnd.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- BQuarterEnd.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

BQuarterBegin

- BQuarterBegin DateOffset increments between the first business day of each Quarter.
- **BQuarterBegin.freqstr** Return a string representing the frequency.

- BQuarterBegin.kwds Return a dict of extra parameters for the offset.
- **BQuarterBegin.name** Return a string representing the base frequency.
- BQuarterBegin.nanos -
- BQuarterBegin.normalize -
- BQuarterBegin.rule_code -
- BQuarterBegin.n -
- BQuarterBegin.startingMonth -
- BQuarterBegin.copy () Return a copy of the frequency.
- BQuarterBegin.is_anchored () Return boolean whether the frequency is a unit frequency (n\=1).
- BQuarterBegin.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- BQuarterBegin.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- BQuarterBegin.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- BQuarterBegin.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- BQuarterBegin.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- BQuarterBegin.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- BQuarterBegin.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

QuarterEnd

- QuarterEnd DateOffset increments between Quarter end dates.
- QuarterEnd.freqstr Return a string representing the frequency.
- QuarterEnd.kwds Return a dict of extra parameters for the offset.
- QuarterEnd.name Return a string representing the base frequency.
- QuarterEnd.nanos -
- QuarterEnd.normalize -
- QuarterEnd.rule code -
- QuarterEnd.n -
- QuarterEnd.startingMonth -
- QuarterEnd.copy () Return a copy of the frequency.
- QuarterEnd.is_anchored () Return boolean whether the frequency is a unit frequency (n\=1).
- QuarterEnd.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- QuarterEnd.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- QuarterEnd.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.

- QuarterEnd.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- QuarterEnd.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- QuarterEnd.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- QuarterEnd.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

QuarterBegin

- QuarterBegin DateOffset increments between Quarter start dates.
- QuarterBegin.freqstr Return a string representing the frequency.
- QuarterBegin.kwds Return a dict of extra parameters for the offset.
- QuarterBegin.name Return a string representing the base frequency.
- QuarterBegin.nanos -
- QuarterBegin.normalize -
- QuarterBegin.rule_code -
- QuarterBegin.n -
- QuarterBegin.startingMonth -
- QuarterBegin.copy () Return a copy of the frequency.
- QuarterBegin.is_anchored () Return boolean whether the frequency is a unit frequency (n\=1).
- QuarterBegin.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- QuarterBegin.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- QuarterBegin.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- QuarterBegin.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- QuarterBegin.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- QuarterBegin.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- QuarterBegin.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

BYearEnd

- **BYearEnd** DateOffset increments between the last business day of the year.
- **BYearEnd.freqstr** Return a string representing the frequency.

- BYearEnd.kwds Return a dict of extra parameters for the offset.
- **BYearEnd.name** Return a string representing the base frequency.
- BYearEnd.nanos -
- BYearEnd.normalize -
- BYearEnd.rule code -
- BYearEnd.n -
- BYearEnd.month -
- BYearEnd.copy () Return a copy of the frequency.
- BYearEnd.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- BYearEnd.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- BYearEnd.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- BYearEnd.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- BYearEnd.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- BYearEnd.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- BYearEnd.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- BYearEnd.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

BYearBegin

- BYearBegin DateOffset increments between the first business day of the year.
- BYearBegin.freqstr Return a string representing the frequency.
- BYearBegin.kwds Return a dict of extra parameters for the offset.
- **BYearBegin.name** Return a string representing the base frequency.
- BYearBegin.nanos -
- BYearBegin.normalize -
- BYearBegin.rule_code -
- BYearBegin.n -
- BYearBegin.month -
- BYearBegin.copy () Return a copy of the frequency.
- BYearBegin.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- BYearBegin.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- BYearBegin.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- BYearBegin.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.

- BYearBegin.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- BYearBegin.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- BYearBegin.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- BYearBegin.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

YearEnd

- YearEnd DateOffset increments between calendar year end dates.
- YearEnd.freqstr Return a string representing the frequency.
- YearEnd.kwds Return a dict of extra parameters for the offset.
- YearEnd.name Return a string representing the base frequency.
- YearEnd.nanos -
- YearEnd.normalize -
- YearEnd.rule code -
- YearEnd.n -
- YearEnd.month -
- YearEnd.copy () Return a copy of the frequency.
- YearEnd.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- YearEnd.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- YearEnd.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- YearEnd.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- YearEnd.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- YearEnd.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- YearEnd.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- YearEnd.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

YearBegin

- YearBegin DateOffset increments between calendar year begin dates.
- YearBegin.freqstr Return a string representing the frequency.

- YearBegin.kwds Return a dict of extra parameters for the offset.
- YearBegin.name Return a string representing the base frequency.
- YearBegin.nanos -
- YearBegin.normalize -
- YearBegin.rule_code -
- YearBegin.n -
- YearBegin.month -
- YearBegin.copy () Return a copy of the frequency.
- YearBegin.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- YearBegin.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- YearBegin.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- YearBegin.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- YearBegin.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- YearBegin.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- YearBegin.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- YearBegin.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

FY5253

- FY5253 Describes 52-53 week fiscal year.
- FY5253.fregstr Return a string representing the frequency.
- FY5253.kwds Return a dict of extra parameters for the offset.
- FY5253.name Return a string representing the base frequency.
- FY5253.nanos -
- FY5253.normalize -
- FY5253.rule code -
- FY5253.n -
- FY5253.startingMonth -
- FY5253.variation -
- FY5253.weekday -
- FY5253.copy () Return a copy of the frequency.
- FY5253.get_rule_code_suffix () -
- FY5253.get_year_end (dt) -
- FY5253.is_anchored () Return boolean whether the frequency is a unit frequency (n\=1).
- FY5253.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- FY5253.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.

- FY5253.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- FY5253.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- FY5253.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- FY5253.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- FY5253.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

FY5253Quarter

- FY5253Quarter DateOffset increments between business quarter dates for 52-53 week fiscal year.
- FY5253Quarter.freqstr Return a string representing the frequency.
- FY5253Quarter.kwds Return a dict of extra parameters for the offset.
- FY5253Quarter.name Return a string representing the base frequency.
- FY5253Quarter.nanos -
- FY5253Quarter.normalize -
- FY5253Quarter.rule_code -
- FY5253Quarter.n -
- FY5253Quarter.qtr_with_extra_week -
- FY5253Quarter.startingMonth -
- FY5253Quarter.variation -
- FY5253Quarter.weekday -
- FY5253Quarter.copy () Return a copy of the frequency.
- FY5253Quarter.get_rule_code_suffix () -
- FY5253Quarter.get_weeks (dt) -
- FY5253Quarter.is_anchored () Return boolean whether the frequency is a unit frequency (n\=1).
- FY5253Quarter.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- FY5253Quarter.year has extra week (dt) -
- FY5253Quarter.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- FY5253Quarter.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- FY5253Quarter.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- FY5253Quarter.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- FY5253Quarter.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- FY5253Quarter.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

Easter

- Easter DateOffset for the Easter holiday using logic defined in dateutil.
- Easter.freqstr Return a string representing the frequency.
- Easter.kwds Return a dict of extra parameters for the offset.
- **Easter.name** Return a string representing the base frequency.
- Easter.nanos -
- Easter.normalize -
- Easter.rule_code -
- Easter.n -
- Easter.copy () Return a copy of the frequency.
- Easter.is_anchored () (DEPRECATED) Return boolean whether the frequency is a unit frequency (n\=1).
- Easter.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- Easter.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- Easter.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- Easter.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- Easter.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- Easter.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- Easter.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

Tick

- Tick -
- Tick.delta -
- Tick.fregstr Return a string representing the frequency.
- Tick.kwds Return a dict of extra parameters for the offset.
- Tick.name Return a string representing the base frequency.
- **Tick.nanos** Return an integer of the total number of nanoseconds.
- Tick.normalize -
- Tick.rule code -
- Tick.n -
- Tick.copy () Return a copy of the frequency.
- Tick.is_anchored () (DEPRECATED) Return False.
- Tick.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- Tick.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.

- Tick.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- Tick.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- Tick.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- Tick.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- Tick.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

Day

- Day Offset n days.
- Day.delta -
- Day.freqstr Return a string representing the frequency.
- Day.kwds Return a dict of extra parameters for the offset.
- Day.name Return a string representing the base frequency.
- Day.nanos Return an integer of the total number of nanoseconds.
- Day.normalize -
- Day.rule_code -
- Day.n -
- Day.copy () Return a copy of the frequency.
- Day.is_anchored () (DEPRECATED) Return False.
- Day.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- Day.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- Day.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- Day.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- Day.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- Day.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- Day.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

Hour

- Hour Offset n hours.
- Hour.delta -
- Hour.fregstr Return a string representing the frequency.
- Hour.kwds Return a dict of extra parameters for the offset.
- Hour.name Return a string representing the base frequency.

- **Hour.nanos** Return an integer of the total number of nanoseconds.
- Hour.normalize -
- Hour.rule code -
- Hour.n -
- Hour.copy () Return a copy of the frequency.
- Hour.is_anchored () (DEPRECATED) Return False.
- Hour.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- Hour.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- Hour.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- Hour.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- Hour.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- Hour.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- Hour.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

Minute

- Minute Offset n minutes.
- Minute.delta -
- Minute.freqstr Return a string representing the frequency.
- Minute.kwds Return a dict of extra parameters for the offset.
- Minute.name Return a string representing the base frequency.
- Minute.nanos Return an integer of the total number of nanoseconds.
- Minute.normalize -
- Minute.rule code -
- Minute.n -
- Minute.copy () Return a copy of the frequency.
- Minute.is_anchored () (DEPRECATED) Return False.
- Minute.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- Minute.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- Minute.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- Minute.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- Minute.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- Minute.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.

• Minute.is_year_end (ts) - Return boolean whether a timestamp occurs on the year end.

Second

- Second Offset n seconds.
- Second.delta -
- Second.freqstr Return a string representing the frequency.
- **Second.kwds** Return a dict of extra parameters for the offset.
- **Second.name** Return a string representing the base frequency.
- **Second.nanos** Return an integer of the total number of nanoseconds.
- Second.normalize -
- Second.rule code -
- · Second.n -
- Second.copy () Return a copy of the frequency.
- Second.is_anchored () (DEPRECATED) Return False.
- **Second.is_on_offset** (dt) Return boolean whether a timestamp intersects with this frequency.
- **Second.is_month_start (ts)** Return boolean whether a timestamp occurs on the month start.
- **Second.is_month_end (ts)** Return boolean whether a timestamp occurs on the month end.
- **Second.is_quarter_start (ts)** Return boolean whether a timestamp occurs on the quarter start.
- **Second.is_quarter_end (ts)** Return boolean whether a timestamp occurs on the quarter end.
- Second.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- **Second.is_year_end (ts)** Return boolean whether a timestamp occurs on the year end.

Milli

- Milli Offset n milliseconds.
- Milli.delta -
- Milli.fregstr Return a string representing the frequency.
- Milli.kwds Return a dict of extra parameters for the offset.
- Milli.name Return a string representing the base frequency.
- Milli.nanos Return an integer of the total number of nanoseconds.
- Milli.normalize -
- Milli.rule_code -
- Milli.n -
- Milli.copy () Return a copy of the frequency.
- Milli.is_anchored () (DEPRECATED) Return False.

- Milli.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- Milli.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- Milli.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- Milli.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- Milli.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- Milli.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- Milli.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

Micro

- Micro Offset n microseconds.
- Micro.delta -
- Micro.freqstr Return a string representing the frequency.
- Micro.kwds Return a dict of extra parameters for the offset.
- Micro.name Return a string representing the base frequency.
- Micro.nanos Return an integer of the total number of nanoseconds.
- Micro.normalize -
- Micro.rule_code -
- Micro.n -
- Micro.copy () Return a copy of the frequency.
- Micro.is_anchored () (DEPRECATED) Return False.
- Micro.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- Micro.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- Micro.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- Micro.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- Micro.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- Micro.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- Micro.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

Nano

• Nano - Offset n nanoseconds.

- Nano.delta -
- Nano.freqstr Return a string representing the frequency.
- Nano.kwds Return a dict of extra parameters for the offset.
- Nano.name Return a string representing the base frequency.
- Nano.nanos Return an integer of the total number of nanoseconds.
- Nano.normalize -
- Nano.rule_code -
- Nano.n -
- Nano.copy () Return a copy of the frequency.
- Nano.is_anchored () (DEPRECATED) Return False.
- Nano.is_on_offset (dt) Return boolean whether a timestamp intersects with this frequency.
- Nano.is_month_start (ts) Return boolean whether a timestamp occurs on the month start.
- Nano.is_month_end (ts) Return boolean whether a timestamp occurs on the month end.
- Nano.is_quarter_start (ts) Return boolean whether a timestamp occurs on the quarter start.
- Nano.is_quarter_end (ts) Return boolean whether a timestamp occurs on the quarter end.
- Nano.is_year_start (ts) Return boolean whether a timestamp occurs on the year start.
- Nano.is_year_end (ts) Return boolean whether a timestamp occurs on the year end.

Window

Rolling window functions

- Rolling.count ([numeric_only]) Calculate the rolling count of non NaN observations.
- Rolling.sum ([numeric_only, engine, ...]) Calculate the rolling sum.
- Rolling.mean ([numeric_only, engine, ...]) Calculate the rolling mean.
- Rolling.median ([numeric_only, engine, ...]) Calculate the rolling median.
- Rolling.var ([ddof, numeric_only, engine, ...]) Calculate the rolling variance.
- Rolling.std ([ddof, numeric_only, engine, ...]) Calculate the rolling standard deviation.
- Rolling.min ([numeric_only, engine, ...]) Calculate the rolling minimum.
- Rolling.max ([numeric_only, engine, ...]) Calculate the rolling maximum.
- Rolling.corr ([other, pairwise, ddof, ...]) Calculate the rolling correlation.
- Rolling.cov ([other, pairwise, ddof, ...]) Calculate the rolling sample covariance.

- Rolling.skew ([numeric_only]) Calculate the rolling unbiased skewness.
- Rolling.kurt ([numeric_only]) Calculate the rolling Fisher's definition of kurtosis without bias.
- Rolling.apply (func[, raw, engine, ...]) Calculate the rolling custom aggregation function.
- Rolling.aggregate (func, *args, **kwargs) Aggregate using one or more operations over the specified axis.
- Rolling.quantile (q[, interpolation, ...]) Calculate the rolling quantile.
- Rolling.sem ([ddof, numeric_only]) Calculate the rolling standard error of mean.
- Rolling.rank ([method, ascending, pct, ...]) Calculate the rolling rank.

Weighted window functions

- Window.mean ([numeric_only]) Calculate the rolling weighted window mean.
- Window.sum ([numeric_only]) Calculate the rolling weighted window sum.
- Window.var ([ddof, numeric_only]) Calculate the rolling weighted window variance.
- Window.std ([ddof, numeric_only]) Calculate the rolling weighted window standard deviation.

Expanding window functions

- Expanding.count ([numeric_only]) Calculate the expanding count of non NaN observations.
- Expanding.sum ([numeric_only, engine, ...]) Calculate the expanding sum.
- Expanding.mean ([numeric_only, engine, ...]) Calculate the expanding mean.
- Expanding.median ([numeric_only, engine, ...]) Calculate the expanding median.
- Expanding.var ([ddof, numeric_only, engine, ...]) Calculate the expanding variance.
- Expanding.std ([ddof, numeric_only, engine, ...]) Calculate the expanding standard deviation.
- Expanding.min ([numeric_only, engine, ...]) Calculate the expanding minimum.
- Expanding.max ([numeric_only, engine, ...]) Calculate the expanding maximum.
- Expanding.corr ([other, pairwise, ddof, ...]) Calculate the expanding correlation.
- Expanding.cov ([other, pairwise, ddof, ...]) Calculate the expanding sample covariance.

- Expanding.skew ([numeric_only]) Calculate the expanding unbiased skewness.
- Expanding.kurt ([numeric_only]) Calculate the expanding Fisher's definition of kurtosis without bias.
- Expanding.apply (func[, raw, engine, ...]) Calculate the expanding custom aggregation function.
- Expanding.aggregate (func, *args, **kwargs) Aggregate using one or more operations over the specified axis.
- Expanding.quantile (q[, interpolation, ...]) Calculate the expanding quantile.
- Expanding.sem ([ddof, numeric_only]) Calculate the expanding standard error of mean.
- Expanding.rank ([method, ascending, pct, ...]) Calculate the expanding rank.

Exponentially-weighted window functions

- ExponentialMovingWindow.mean ([numeric_only, ...]) Calculate the ewm (exponential weighted moment) mean.
- ExponentialMovingWindow.sum ([numeric_only, ...]) Calculate the ewm (exponential weighted moment) sum.
- ExponentialMovingWindow.std ([bias, numeric_only]) Calculate the ewm (exponential weighted moment) standard deviation.
- ExponentialMovingWindow.var ([bias, numeric_only]) Calculate the ewm (exponential weighted moment) variance.
- ExponentialMovingWindow.corr ([other, ...]) Calculate the ewm (exponential weighted moment) sample correlation.
- ExponentialMovingWindow.cov ([other, ...]) Calculate the ewm (exponential weighted moment) sample covariance.

Window indexer

- api.indexers.BaseIndexer ([index_array, ...]) Base class for window bounds calculations.
- api.indexers.FixedForwardWindowIndexer ([...]) Creates window boundaries for fixed-length windows that include the current row.
- api.indexers.VariableOffsetWindowIndexer ([...]) Calculate window boundaries based on a non-fixed offset such as a BusinessDay.

GroupBy

Indexing, iteration

- DataFrameGroupBy.__iter__ () Groupby iterator.
- SeriesGroupBy.__iter__ () Groupby iterator.
 DataFrameGroupBy.groups Dict {group name -> group labels}.
- SeriesGroupBy.groups Dict {group name -> group labels}.
- DataFrameGroupBy.indices Dict {group name -> group indices \}.
- SeriesGroupBy.indices Dict {group name -> group indices}.
- DataFrameGroupBy.get_group (name[, obj]) Construct DataFrame from group with provided name.
- SeriesGroupBy.get_group (name[, obj]) Construct DataFrame from group with provided name.
- Grouper (*args, **kwargs) A Grouper allows the user to specify a groupby instruction for an object.

Function application helper

NamedAgg (column, aggfunc) - Helper for column specific aggregation with control over output column names.

Function application

- SeriesGroupBy.apply (func, *args, **kwargs) Apply function func group-wise and combine the results together.
- DataFrameGroupBy.apply (func, *args[, ...]) Apply function func group-wise and combine the results together.
- SeriesGroupBy.agg ([func, engine, engine_kwargs]) Aggregate using one or more operations over the specified axis.
- DataFrameGroupBy.agg ([func, engine, ...]) Aggregate using one or more operations over the specified axis.
- SeriesGroupBy.aggregate ([func, engine, ...]) Aggregate using one or more operations over the specified axis.
- DataFrameGroupBy.aggregate ([func, engine, ...]) Aggregate using one or more operations over the specified axis.
- SeriesGroupBy.transform (func, *args[, ...]) Call function producing a same-indexed Series on each group.
- DataFrameGroupBy.transform (func, *args[, ...]) Call function producing a same-indexed DataFrame on each group.
- SeriesGroupBy.pipe (func, *args, **kwargs) Apply a func with arguments to this GroupBy object and return its result.
- DataFrameGroupBy.pipe (func, *args, **kwargs) Apply a func with arguments to this GroupBy object and return its result.
- DataFrameGroupBy.filter (func[, dropna]) Filter elements from groups that don't satisfy a criterion.

• SeriesGroupBy.filter (func[, dropna]) - Filter elements from groups that don't satisfy a criterion.

DataFrameGroupBy computations / descriptive stats

- DataFrameGroupBy.all ([skipna]) Return True if all values in the group are truthful, else False.
- DataFrameGroupBy.any ([skipna]) Return True if any value in the group is truthful, else False.
- DataFrameGroupBy.bfill ([limit]) Backward fill the values.
- DataFrameGroupBy.corr ([method, min_periods, ...]) Compute pairwise correlation of columns, excluding NA/null values.
- DataFrameGroupBy.corrwith (other[, axis, ...]) Compute pairwise correlation.
- DataFrameGroupBy.count () Compute count of group, excluding missing values.
- DataFrameGroupBy.cov ([min_periods, ddof, ...]) Compute pairwise covariance of columns, excluding NA/null values.
- DataFrameGroupBy.cumcount ([ascending]) Number each item in each group from 0 to the length of that group 1.
- DataFrameGroupBy.cummax ([axis, numeric_only]) Cumulative max for each group.
- DataFrameGroupBy.cummin ([axis, numeric_only]) Cumulative min for each group.
- DataFrameGroupBy.cumprod ([axis]) Cumulative product for each group.
- DataFrameGroupBy.cumsum ([axis]) Cumulative sum for each group.
- DataFrameGroupBy.describe ([percentiles, ...]) Generate descriptive statistics.
- DataFrameGroupBy.diff ([periods, axis]) First discrete difference of element.
- DataFrameGroupBy.ffill ([limit]) Forward fill the values.
- DataFrameGroupBy.fillna ([value, method, ...]) (DEPRECATED) Fill NA/NaN values using the specified method within groups.
- DataFrameGroupBy.first ([numeric_only, ...]) Compute the first entry of each column within each group.
- DataFrameGroupBy.head ([n]) Return first n rows of each group.
- DataFrameGroupBy.idxmax ([axis, skipna, ...]) Return index of first occurrence of maximum over requested axis.
- DataFrameGroupBy.idxmin ([axis, skipna, ...]) Return index of first occurrence of minimum over requested axis.
- DataFrameGroupBy.last ([numeric_only, ...]) Compute the last entry of each column within each group.
- DataFrameGroupBy.max ([numeric_only, ...]) Compute max of group values.
- DataFrameGroupBy.mean ([numeric_only, ...]) Compute mean of groups, excluding missing values.

- DataFrameGroupBy.median ([numeric_only]) Compute median of groups, excluding missing values.
- DataFrameGroupBy.min ([numeric_only, ...]) Compute min of group values.
- DataFrameGroupBy.ngroup ([ascending]) Number each group from 0 to the number of groups 1.
- DataFrameGroupBy.nth Take the nth row from each group if n is an int, otherwise a subset of rows.
- DataFrameGroupBy.nunique ([dropna]) Return DataFrame with counts of unique elements in each position.
- DataFrameGroupBy.ohlc () Compute open, high, low and close values of a group, excluding missing values.
- DataFrameGroupBy.pct_change ([periods, ...]) Calculate pct_change of each value to previous entry in group.
- DataFrameGroupBy.prod ([numeric_only, min_count]) Compute prod of group values.
- DataFrameGroupBy.quantile ([q, ...]) Return group values at the given quantile, a la numpy.percentile.
- DataFrameGroupBy.rank ([method, ascending, ...]) Provide the rank of values within each group.
- DataFrameGroupBy.resample (rule, *args[, ...]) Provide resampling when using a TimeGrouper.
- DataFrameGroupBy.rolling (*args, **kwargs) Return a rolling grouper, providing rolling functionality per group.
- DataFrameGroupBy.sample ([n, frac, replace, ...]) Return a random sample of items from each group.
- DataFrameGroupBy.sem ([ddof, numeric_only]) Compute standard error of the mean of groups, excluding missing values.
- DataFrameGroupBy.shift ([periods, freq, ...]) Shift each group by periods observations.
- DataFrameGroupBy.size () Compute group sizes.
- DataFrameGroupBy.skew ([axis, skipna, ...]) Return unbiased skew within groups.
- DataFrameGroupBy.std ([ddof, engine, ...]) Compute standard deviation of groups, excluding missing values.
- DataFrameGroupBy.sum ([numeric_only, ...]) Compute sum of group values.
- DataFrameGroupBy.var ([ddof, engine, ...]) Compute variance of groups, excluding missing values.
- DataFrameGroupBy.tail ([n]) Return last n rows of each group.
- DataFrameGroupBy.take (indices[, axis]) Return the elements in the given positional indices in each group.
- DataFrameGroupBy.value_counts ([subset, ...]) Return a Series or DataFrame containing counts of unique rows.

SeriesGroupBy computations / descriptive stats

- SeriesGroupBy.all ([skipna]) Return True if all values in the group are truthful, else False.
- SeriesGroupBy.any ([skipna]) Return True if any value in the group is truthful, else False.
- SeriesGroupBy.bfill ([limit]) Backward fill the values.
- SeriesGroupBy.corr (other[, method, min_periods]) Compute correlation with other Series, excluding missing values.
- SeriesGroupBy.count () Compute count of group, excluding missing values.
- SeriesGroupBy.cov (other[, min_periods, ddof]) Compute covariance with Series, excluding missing values.
- SeriesGroupBy.cumcount ([ascending]) Number each item in each group from 0 to the length of that group 1.
- SeriesGroupBy.cummax ([axis, numeric_only]) Cumulative max for each group.
- SeriesGroupBy.cummin ([axis, numeric_only]) Cumulative min for each group.
- SeriesGroupBy.cumprod ([axis]) Cumulative product for each group.
- SeriesGroupBy.cumsum ([axis]) Cumulative sum for each group.
- SeriesGroupBy.describe ([percentiles, ...]) Generate descriptive statistics.
- SeriesGroupBy.diff ([periods, axis]) First discrete difference of element.
- SeriesGroupBy.ffill ([limit]) Forward fill the values.
- SeriesGroupBy.fillna ([value, method, axis, ...]) (DEPRECATED) Fill NA/NaN values using the specified method within groups.
- SeriesGroupBy.first ([numeric_only, ...]) Compute the first entry of each column within each group.
- SeriesGroupBy.head ([n]) Return first n rows of each group.
- SeriesGroupBy.last ([numeric_only, ...]) Compute the last entry of each column within each group.
- SeriesGroupBy.idxmax ([axis, skipna]) Return the row label of the maximum value.
- SeriesGroupBy.idxmin ([axis, skipna]) Return the row label of the minimum value.
- **SeriesGroupBy.is_monotonic_increasing** Return whether each group's values are monotonically increasing.
- **SeriesGroupBy.is_monotonic_decreasing** Return whether each group's values are monotonically decreasing.
- SeriesGroupBy.max ([numeric_only, min_count, ...]) Compute max of group values.
- SeriesGroupBy.mean ([numeric_only, engine, ...]) Compute mean of groups, excluding missing values.
- SeriesGroupBy.median ([numeric_only]) Compute median of groups, excluding missing values.

- SeriesGroupBy.min ([numeric_only, min_count, ...]) Compute min of group values.
- SeriesGroupBy.ngroup ([ascending]) Number each group from 0 to the number of groups 1.
- SeriesGroupBy.nlargest ([n, keep]) Return the largest n elements.
- SeriesGroupBy.nsmallest ([n, keep]) Return the smallest n elements.
- SeriesGroupBy.nth Take the nth row from each group if n is an int, otherwise a subset of rows.
- SeriesGroupBy.nunique ([dropna]) Return number of unique elements in the group.
- SeriesGroupBy.unique () Return unique values for each group.
- SeriesGroupBy.ohlc () Compute open, high, low and close values of a group, excluding missing values.
- SeriesGroupBy.pct_change ([periods, ...]) Calculate pct_change of each value to previous entry in group.
- SeriesGroupBy.prod ([numeric_only, min_count]) Compute prod of group values.
- SeriesGroupBy.quantile ([q, interpolation, ...]) Return group values at the given quantile, a la numpy.percentile.
- SeriesGroupBy.rank ([method, ascending, ...]) Provide the rank of values within each group.
- SeriesGroupBy.resample (rule, *args[, ...]) Provide resampling when using a TimeGrouper.
- SeriesGroupBy.rolling (*args, **kwargs) Return a rolling grouper, providing rolling functionality per group.
- SeriesGroupBy.sample ([n, frac, replace, ...]) Return a random sample of items from each group.
- SeriesGroupBy.sem ([ddof, numeric_only]) Compute standard error of the mean of groups, excluding missing values.
- SeriesGroupBy.shift ([periods, freq, axis, ...]) Shift each group by periods observations.
- SeriesGroupBy.size () Compute group sizes.
- SeriesGroupBy.skew ([axis, skipna, numeric_only]) Return unbiased skew within groups.
- SeriesGroupBy.std ([ddof, engine, ...]) Compute standard deviation of groups, excluding missing values.
- SeriesGroupBy.sum ([numeric_only, min_count, ...]) Compute sum of group values.
- SeriesGroupBy.var ([ddof, engine, ...]) Compute variance of groups, excluding missing values.
- SeriesGroupBy.tail ([n]) Return last n rows of each group.
- SeriesGroupBy.take (indices[, axis]) Return the elements in the given positional indices in each group.
- SeriesGroupBy.value_counts ([normalize, ...]) -

Plotting and visualization

• DataFrameGroupBy.boxplot ([subplots, column, ...]) - Make box plots from DataFrameGroupBy data.

- DataFrameGroupBy.hist ([column, by, grid, ...]) Make a histogram of the DataFrame's columns.
- SeriesGroupBy.hist ([by, ax, grid, ...]) Draw histogram of the input series using matplotlib.
- DataFrameGroupBy.plot Make plots of Series or DataFrame.
- SeriesGroupBy.plot Make plots of Series or DataFrame.

Resampling

Indexing, iteration

- Resampler.__iter__ () Groupby iterator.
- **Resampler.groups** Dict {group name -> group labels}.
- Resampler.indices Dict {group name -> group indices}.
- Resampler.get_group (name[, obj]) Construct DataFrame from group with provided name.

Function application

- Resampler.apply ([func]) Aggregate using one or more operations over the specified axis.
- Resampler.aggregate ([func]) Aggregate using one or more operations over the specified axis.
- Resampler.transform (arg, *args, **kwargs) Call function producing a like-indexed Series on each group.
- Resampler.pipe (func, *args, **kwargs) Apply a func with arguments to this Resampler object and return its result.

Upsampling

- Resampler.ffill ([limit]) Forward fill the values.
- Resampler.bfill ([limit]) Backward fill the new missing values in the resampled data.
- **Resampler.nearest ([limit])** Resample by using the nearest value.
- Resampler.fillna (method[, limit]) Fill missing values introduced by upsampling.
- Resampler.asfreq ([fill_value]) Return the values at the new freq, essentially a reindex.
- Resampler.interpolate ([method, axis, limit, ...]) Interpolate values between target timestamps according to different methods.

Computations / descriptive stats

- **Resampler.count ()** Compute count of group, excluding missing values.
- Resampler.nunique (*args, **kwargs) Return number of unique elements in the group.
- Resampler.first ([numeric_only, min_count, ...]) Compute the first entry of each column within each group.
- Resampler.last ([numeric_only, min_count, skipna]) Compute the last entry of each column within each group.
- Resampler.max ([numeric_only, min_count]) Compute max value of group.
- Resampler.mean ([numeric_only]) Compute mean of groups, excluding missing values.
- **Resampler.median ([numeric_only])** Compute median of groups, excluding missing values.
- Resampler.min ([numeric_only, min_count]) Compute min value of group.
- Resampler.ohlc (*args, **kwargs) Compute open, high, low and close values of a group, excluding missing values.
- Resampler.prod ([numeric_only, min_count]) Compute prod of group values.
- Resampler.size () Compute group sizes.
- Resampler.sem ([ddof, numeric_only]) Compute standard error of the mean of groups, excluding missing values.
- Resampler.std ([ddof, numeric_only]) Compute standard deviation of groups, excluding missing values.
- Resampler.sum ([numeric_only, min_count]) Compute sum of group values.
- Resampler.var ([ddof, numeric_only]) Compute variance of groups, excluding missing values.
- Resampler.quantile ([q]) Return value at the given quantile.

Style

Styler constructor

- Styler (data[, precision, table_styles, ...]) Helps style a DataFrame or Series according to the data with HTML and CSS.
- Styler.from_custom_template (searchpath[, ...]) Factory function for creating a subclass of Styler .

Styler properties

- Styler.env -
- Styler.template_html -

- Styler.template_html_style -
- Styler.template_html_table -
- Styler.template_latex -
- Styler.template string -
- Styler.loader -

Style application

- Styler.apply (func[, axis, subset]) Apply a CSS-styling function column-wise, row-wise, or table-wise.
- Styler.map (func[, subset]) Apply a CSS-styling function elementwise.
- Styler.apply_index (func[, axis, level]) Apply a CSS-styling function to the index or column headers, level-wise.
- Styler.map_index (func[, axis, level]) Apply a CSS-styling function to the index or column headers, elementwise.
- Styler.format ([formatter, subset, na_rep, ...]) Format the text display value of cells.
- Styler.format_index ([formatter, axis, ...]) Format the text display value of index labels or column headers.
- Styler.relabel_index (labels[, axis, level]) Relabel the index, or column header, keys to display a set of specified values.
- Styler.hide ([subset, axis, level, names]) Hide the entire index / column headers, or specific rows / columns from display.
- Styler.concat (other) Append another Styler to combine the output into a single table.
- Styler.set_td_classes (classes) Set the class attribute of
- Styler.set_table_styles ([table_styles, ...]) Set the table styles included within the
- Styler.set_table_attributes (attributes) Set the table attributes added to the
- Styler.set_tooltips (ttips[, props, css_class]) Set the DataFrame of strings on Styler generating :hover tooltips.
- Styler.set_caption (caption) Set the text added to a
- Styler.set_sticky ([axis, pixel_size, levels]) Add CSS to permanently display the index or column headers in a scrolling frame.
- Styler.set_properties ([subset]) Set defined CSS-properties to each
- Styler.set_uuid (uuid) Set the uuid applied to id attributes of HTML elements.
- Styler.clear () Reset the Styler , removing any previously applied styles.
- Styler.pipe (func, *args, **kwargs) Apply func(self, *args, **kwargs) , and return the result.

Builtin styles

- Styler.highlight_null ([color, subset, props]) Highlight missing values with a style.
- Styler.highlight_max ([subset, color, axis, ...]) Highlight the maximum with a style.
- Styler.highlight_min ([subset, color, axis, ...]) Highlight the minimum with a style.
- Styler.highlight_between ([subset, color, ...]) Highlight a defined range with a style.
- Styler.highlight_quantile ([subset, color, ...]) Highlight values defined by a quantile with a style.
- Styler.background_gradient ([cmap, low, ...]) Color the background in a gradient style.
- Styler.text_gradient ([cmap, low, high, ...]) Color the text in a gradient style.
- Styler.bar ([subset, axis, color, cmap, ...]) Draw bar chart in the cell backgrounds.

Style export and import

- Styler.to_html ([buf, table_uuid, ...]) Write Styler to a file, buffer or string in HTML-CSS format.
- Styler.to_latex ([buf, column_format, ...]) Write Styler to a file, buffer or string in LaTeX format.
- Styler.to_excel (excel_writer[, sheet_name, ...]) Write Styler to an Excel sheet.
- Styler.to_string ([buf, encoding, ...]) Write Styler to a file, buffer or string in text format.
- **Styler.export ()** Export the styles applied to the current Styler.
- Styler.use (styles) Set the styles on the current Styler.

Plotting

- andrews_curves (frame, class_column[, ax, ...]) Generate a matplotlib plot for visualizing clusters of multivariate data.
- autocorrelation_plot (series[, ax]) Autocorrelation plot for time series.
- bootstrap_plot (series[, fig, size, samples]) Bootstrap plot on mean, median and mid-range statistics.
- boxplot (data[, column, by, ax, fontsize, ...]) Make a box plot from DataFrame columns.
- deregister_matplotlib_converters () Remove pandas formatters and converters.
- lag_plot (series[, lag, ax]) Lag plot for time series.

- parallel_coordinates (frame, class_column[, ...]) Parallel coordinates plotting.
- plot_params Stores pandas plotting options.
- radviz (frame, class_column[, ax, color, ...]) Plot a multidimensional dataset in 2D.
- register_matplotlib_converters () Register pandas formatters and converters with matplotlib.
- scatter_matrix (frame[, alpha, figsize, ax, ...]) Draw a matrix of scatter plots.
- table (ax, data, **kwargs) Helper function to convert DataFrame and Series to matplotlib.table.

Options and settings

Working with options

- describe_option (pat[, _print_desc]) Prints the description for one or more registered options.
- reset_option (pat) Reset one or more options to their default value.
- **get_option (pat)** Retrieves the value of the specified option.
- **set_option (pat, value)** Sets the value of the specified option.
- option_context (*args) Context manager to temporarily set options in the with statement context.

Numeric formatting

• set_eng_float_format ([accuracy, use_eng_prefix]) - Format float representation in DataFrame with SI notation.

Extensions

- api.extensions.register_extension_dtype (cls) Register an ExtensionType with pandas as class decorator.
- api.extensions.register_dataframe_accessor (name) Register a custom accessor on DataFrame objects.
- api.extensions.register_series_accessor (name) Register a custom accessor on Series objects.
- api.extensions.register_index_accessor (name) Register a custom accessor on Index objects.
- api.extensions.ExtensionDtype () A custom data type, to be paired with an ExtensionArray.
- api.extensions.ExtensionArray () Abstract base class for custom 1-D array types.
- arrays.NumpyExtensionArray (values[, copy]) A pandas ExtensionArray for NumPy data.

• api.indexers.check_array_indexer (array, indexer) - Check if indexer is a valid array indexer for array .

Testing

Assertion functions

- testing.assert_frame_equal (left, right[, ...]) Check that left and right DataFrame are equal.
- testing.assert_series_equal (left, right[, ...]) Check that left and right Series are equal.
- testing.assert_index_equal (left, right[, ...]) Check that left and right Index are equal.
- testing.assert_extension_array_equal (left, right) Check that left and right ExtensionArrays are equal.

Exceptions and warnings

- errors.AbstractMethodError (class_instance[, ...]) Raise this error instead of NotImplementedError for abstract methods.
- errors.AttributeConflictWarning Warning raised when index attributes conflict when using HDFStore.
- errors.CategoricalConversionWarning Warning is raised when reading a partial labeled Stata file using a iterator.
- errors.ChainedAssignmentError Warning raised when trying to set using chained assignment.
- errors.ClosedFileError Exception is raised when trying to perform an operation on a closed HDFStore file.
- errors.CSSWarning Warning is raised when converting css styling fails.
- errors.DatabaseError Error is raised when executing sql with bad syntax or sql that throws an error.
- errors.DataError Exceptionn raised when performing an operation on non-numerical data.
- errors.DtypeWarning Warning raised when reading different dtypes in a column from a file.
- errors.DuplicateLabelError Error raised when an operation would introduce duplicate labels.
- errors.EmptyDataError Exception raised in pd.read_csv when empty data or header is encountered.
- errors.IncompatibilityWarning Warning raised when trying to use where criteria on an incompatible HDF5 file.
- errors.IndexingError Exception is raised when trying to index and there is a mismatch in dimensions.
- errors.InvalidColumnName Warning raised by to_stata the column contains a non-valid stata name.
- errors.InvalidComparison Exception is raised by _validate_comparison_value to indicate an invalid comparison.

- errors.InvalidIndexError Exception raised when attempting to use an invalid index key.
- errors.InvalidVersion An invalid version was found, users should refer to PEP 440.
- errors.IntCastingNaNError Exception raised when converting (astype) an array with NaN to an integer type.
- errors.LossySetitemError Raised when trying to do a __setitem__ on an np.ndarray that is not lossless.
- errors.MergeError Exception raised when merging data.
- errors.NoBufferPresent Exception is raised in _get_data_buffer to signal that there is no requested buffer.
- errors.NullFrequencyError Exception raised when a freq cannot be null.
- errors.NumbaUtilError Error raised for unsupported Numba engine routines.
- errors.NumExprClobberingError Exception raised when trying to use a built-in numexpr name as a variable name.
- errors.OptionError Exception raised for pandas.options.
- errors.OutOfBoundsDatetime Raised when the datetime is outside the range that can be represented.
- errors.OutOfBoundsTimedelta Raised when encountering a timedelta value that cannot be represented.
- errors.ParserError Exception that is raised by an error encountered in parsing file contents.
- errors.ParserWarning Warning raised when reading a file that doesn't use the default 'c' parser.
- errors.PerformanceWarning Warning raised when there is a possible performance impact.
- errors.PossibleDataLossError Exception raised when trying to open a HDFStore file when already opened.
- errors.PossiblePrecisionLoss Warning raised by to_stata on a column with a value outside or equal to int64.
- **errors.PyperclipException** Exception raised when clipboard functionality is unsupported.
- errors.PyperclipWindowsException (message) Exception raised when clipboard functionality is unsupported by Windows.
- errors.SettingWithCopyError Exception raised when trying to set on a copied slice from a DataFrame .
- errors.SettingWithCopyWarning Warning raised when trying to set on a copied slice from a DataFrame .
- **errors.SpecificationError** Exception raised by agg when the functions are ill-specified.
- errors.UndefinedVariableError (name[, is_local]) Exception raised by query or eval when using an undefined variable name.
- errors.UnsortedIndexError Error raised when slicing a MultiIndex which has not been lexsorted.
- errors.UnsupportedFunctionCall Exception raised when attempting to call a unsupported numpy function.
- errors.ValueLabelTypeMismatch Warning raised by to_stata on a category column that contains non-string values.

Bug report function

• show_versions ([as_json]) - Provide useful information, important for bug reports.

Test suite runner

• test ([extra_args, run_doctests]) - Run the pandas test suite using pytest.

Missing values

- NA NA ("not available") missing value indicator.
 NaT (N)ot-(A)-(T)ime, the time equivalent of NaN.