

Pandas - DataFrame Reference

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All properties and methods of the DataFrame object, with explanations and examples:

Property/Method	Description
<u>abs()</u>	Return a DataFrame with the absolute value of each value
<u>add()</u>	Adds the values of a DataFrame with the specified value(s)
<u>add_prefix()</u>	Prefix all labels
<u>add_suffix()</u>	Suffix all labels
<u>agg()</u>	Apply a function or a function name to one of the axis of the DataFrame
<u>aggregate()</u>	Apply a function or a function name to one of the axis of the DataFrame
<u>align()</u>	Aligns two DataFrames with a specified join method
<u>all()</u>	Return True if all values in the DataFrame are True, otherwise False
<u>any()</u>	Returns True if any of the values in the DataFrame are True, otherwise False
<u>append()</u>	Append new columns
<u>applymap()</u>	Execute a function for each element in the DataFrame
<u>apply()</u>	Apply a function to one of the axis of the DataFrame
<u>assign()</u>	Assign new columns
<u>astype()</u>	Convert the DataFrame into a specified dtype
<u>at</u>	Get or set the value of the item with the specified label

<u>axes</u>	Returns the labels of the rows and the columns of the DataFrame
<u>bfill()</u>	Replaces NULL values with the value from the next row
<u>bool()</u>	Returns the Boolean value of the DataFrame
<u>columns</u>	Returns the column labels of the DataFrame
<u>combine()</u>	Compare the values in two DataFrames, and let a function decide which values to keep
<u>combine_first()</u>	Compare two DataFrames, and if the first DataFrame has a NULL value, it will be filled with the respective value from the second DataFrame
<u>compare()</u>	Compare two DataFrames and return the differences
<u>convert_dtypes()</u>	Converts the columns in the DataFrame into new dtypes
<u>corr()</u>	Find the correlation (relationship) between each column
<u>count()</u>	Returns the number of not empty cells for each column/row
<u>cov()</u>	Find the covariance of the columns
<u>copy()</u>	Returns a copy of the DataFrame
<u>cummax()</u>	Calculate the cumulative maximum values of the DataFrame
<u>cummin()</u>	Calculate the cumulative minimum values of the DataFrame
<u>cumprod()</u>	Calculate the cumulative product over the DataFrame
<u>cumsum()</u>	Calculate the cumulative sum over the DataFrame
<u>describe()</u>	Returns a description summary for each column in the DataFrame
<u>diff()</u>	Calculate the difference between a value and the value of the same column in the previous row
<u>div()</u>	Divides the values of a DataFrame with the specified value(s)
<u>dot()</u>	Multiplies the values of a DataFrame with values from another array-like object, and add the result
<u>drop()</u>	Drops the specified rows/columns from the DataFrame
<u>drop_duplicates()</u>	Drops duplicate values from the DataFrame

<u>droplevel()</u>	Drops the specified index/column(s)
<u>dropna()</u>	Drops all rows that contains NULL values
<u>dtypes</u>	Returns the dtypes of the columns of the DataFrame
<u>duplicated()</u>	Returns True for duplicated rows, otherwise False
<u>empty</u>	Returns True if the DataFrame is empty, otherwise False
<u>eq()</u>	Returns True for values that are equal to the specified value(s), otherwise False
<u>equals()</u>	Returns True if two DataFrames are equal, otherwise False
<u>eval</u>	Evaluate a specified string
<u>explode()</u>	Converts each element into a row
<u>ffill()</u>	Replaces NULL values with the value from the previous row
<u>fillna()</u>	Replaces NULL values with the specified value
<u>filter()</u>	Filter the DataFrame according to the specified filter
<u>first()</u>	Returns the first rows of a specified date selection
<u>floordiv()</u>	Divides the values of a DataFrame with the specified value(s), and floor the values
<u>ge()</u>	Returns True for values greater than, or equal to the specified value(s), otherwise False
<u>get()</u>	Returns the item of the specified key
<u>groupby()</u>	Groups the rows/columns into specified groups
<u>gt()</u>	Returns True for values greater than the specified value(s), otherwise False
<u>head()</u>	Returns the header row and the first 10 rows, or the specified number of rows
<u>iat</u>	Get or set the value of the item in the specified position
<u>idxmax()</u>	Returns the label of the max value in the specified axis
<u>idxmin()</u>	Returns the label of the min value in the specified axis
<u>iloc</u>	Get or set the values of a group of elements in the specified positions

<u>index</u>	Returns the row labels of the DataFrame
<u>infer_objects()</u>	Change the dtype of the columns in the DataFrame
<u>info()</u>	Prints information about the DataFrame
<u>insert()</u>	Insert a column in the DataFrame
<u>interpolate()</u>	Replaces not-a-number values with the interpolated method
<u>isin()</u>	Returns True if each elements in the DataFrame is in the specified value
<u>isna()</u>	Finds not-a-number values
<u>isnull()</u>	Finds NULL values
<u>items()</u>	Iterate over the columns of the DataFrame
<u>iteritems()</u>	Iterate over the columns of the DataFrame
<u>iterrows()</u>	Iterate over the rows of the DataFrame
<u>itertuples()</u>	Iterate over the rows as named tuples
<u>join()</u>	Join columns of another DataFrame
<u>last()</u>	Returns the last rows of a specified date selection
<u>le()</u>	Returns True for values less than, or equal to the specified value(s), otherwise False
<u>loc</u>	Get or set the value of a group of elements specified using their labels
<u>lt()</u>	Returns True for values less than the specified value(s), otherwise False
<u>keys()</u>	Returns the keys of the info axis
<u>kurtosis()</u>	Returns the kurtosis of the values in the specified axis
<u>mask()</u>	Replace all values where the specified condition is True
<u>max()</u>	Return the max of the values in the specified axis
<u>mean()</u>	Return the mean of the values in the specified axis
<u>median()</u>	Return the median of the values in the specified axis
<u>melt()</u>	Reshape the DataFrame from a wide table to a long table

<u>memory_usage()</u>	Returns the memory usage of each column
<u>merge()</u>	Merge DataFrame objects
<u>min()</u>	Returns the min of the values in the specified axis
<u>mod()</u>	Modules (find the remainder) of the values of a DataFrame
<u>mode()</u>	Returns the mode of the values in the specified axis
<u>mul()</u>	Multiplies the values of a DataFrame with the specified value(s)
<u>ndim</u>	Returns the number of dimensions of the DataFrame
<u>ne()</u>	Returns True for values that are not equal to the specified value(s), otherwise False
<u>nlargest()</u>	Sort the DataFrame by the specified columns, descending, and return the specified number of rows
<u>notna()</u>	Finds values that are not not-a-number
<u>notnull()</u>	Finds values that are not NULL
<u>nsmallest()</u>	Sort the DataFrame by the specified columns, ascending, and return the specified number of rows
<u>nunique()</u>	Returns the number of unique values in the specified axis
<u>pct_change()</u>	Returns the percentage change between the previous and the current value
<u>pipe()</u>	Apply a function to the DataFrame
<u>pivot()</u>	Re-shape the DataFrame
<u>pivot_table()</u>	Create a spreadsheet pivot table as a DataFrame
<u>pop()</u>	Removes an element from the DataFrame
<u>pow()</u>	Raise the values of one DataFrame to the values of another DataFrame
<u>prod()</u>	Returns the product of all values in the specified axis
<u>product()</u>	Returns the product of the values in the specified axis
<u>quantile()</u>	Returns the values at the specified quantile of the specified axis

<u>query()</u>	Query the DataFrame
<u>radd()</u>	Reverse-adds the values of one DataFrame with the values of another DataFrame
<u>rdiv()</u>	Reverse-divides the values of one DataFrame with the values of another DataFrame
<u>reindex()</u>	Change the labels of the DataFrame
<u>reindex_like()</u>	??
<u>rename()</u>	Change the labels of the axes
<u>rename_axis()</u>	Change the name of the axis
<u>reorder_levels()</u>	Re-order the index levels
<u>replace()</u>	Replace the specified values
<u>reset_index()</u>	Reset the index
<u>rfloordiv()</u>	Reverse-divides the values of one DataFrame with the values of another DataFrame
<u>rmod()</u>	Reverse-modules the values of one DataFrame to the values of another DataFrame
<u>rmul()</u>	Reverse-multiplies the values of one DataFrame with the values of another DataFrame
<u>round()</u>	Returns a DataFrame with all values rounded into the specified format
<u>rpow()</u>	Reverse-raises the values of one DataFrame up to the values of another DataFrame
<u>rsub()</u>	Reverse-subtracts the values of one DataFrame to the values of another DataFrame
<u>rtruediv()</u>	Reverse-divides the values of one DataFrame with the values of another DataFrame
<u>sample()</u>	Returns a random selection elements
<u>sem()</u>	Returns the standard error of the mean in the specified axis
<u>select_dtypes()</u>	Returns a DataFrame with columns of selected data types
<u>shape</u>	Returns the number of rows and columns of the DataFrame

<u>set_axis()</u>	Sets the index of the specified axis
set_flags()	Returns a new DataFrame with the specified flags
<u>set_index()</u>	Set the Index of the DataFrame
<u>size</u>	Returns the number of elements in the DataFrame
<u>skew()</u>	Returns the skew of the values in the specified axis
<u>sort_index()</u>	Sorts the DataFrame according to the labels
<u>sort_values()</u>	Sorts the DataFrame according to the values
<u>squeeze()</u>	Converts a single column DataFrame into a Series
<u>stack()</u>	Reshape the DataFrame from a wide table to a long table
<u>std()</u>	Returns the standard deviation of the values in the specified axis
<u>sum()</u>	Returns the sum of the values in the specified axis
<u>sub()</u>	Subtracts the values of a DataFrame with the specified value(s)
swaplevel()	Swaps the two specified levels
<u>T</u>	Turns rows into columns and columns into rows
<u>tail()</u>	Returns the headers and the last rows
<u>take()</u>	Returns the specified elements
to_xarray()	Returns an xarray object
<u>transform()</u>	Execute a function for each value in the DataFrame
<u>transpose()</u>	Turns rows into columns and columns into rows
<u>truediv()</u>	Divides the values of a DataFrame with the specified value(s)
<u>truncate()</u>	Removes elements outside of a specified set of values
<u>update()</u>	Update one DataFrame with the values from another DataFrame
value_counts()	Returns the number of unique rows
<u>values</u>	Returns the DataFrame as a NumPy array
<u>var()</u>	Returns the variance of the values in the specified axis

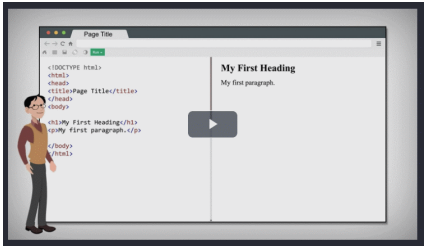
<code>where()</code>	Replace all values where the specified condition is False
<code>xs()</code>	Returns the cross-section of the DataFrame
<code>__iter__()</code>	Returns an iterator of the info axes

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