weekday [int  $\{0, 1, ..., 6\}$ , default 0] A specific integer for the day of the week.

- 0 is Monday
- 1 is Tuesday
- 2 is Wednesday
- 3 is Thursday
- 4 is Friday
- 5 is Saturday
- 6 is Sunday.

**startingMonth** [int  $\{1, 2, ..., 12\}$ , default 1] The month in which the fiscal year ends. **variation** [str, default "nearest"] Method of employing 4-4-5 calendar.

There are two options:

- "nearest" means year end is **weekday** closest to last day of month in year.
- "last" means year end is final weekday of the final month in fiscal year.

#### **Attributes**

base	Returns a copy of the calling offset object with n=1
	and all other attributes equal.

#### pandas.tseries.offsets.FY5253.base

## property FY5253.base

Returns a copy of the calling offset object with n=1 and all other attributes equal.

freqstr	
kwds	
name	
nanos	
rule_code	

#### **Methods**

apply_index(self, other)	Vectorized apply of DateOffset to DatetimeIndex,
	raises NotImplentedError for offsets without a vec-
	torized implementation.
rollback(self, dt)	Roll provided date backward to next offset only if
	not on offset.
rollforward(self, dt)	Roll provided date forward to next offset only if not
	on offset.

#### pandas.tseries.offsets.FY5253.apply\_index

## FY5253.apply\_index(self, other)

Vectorized apply of DateOffset to DatetimeIndex, raises NotImplentedError for offsets without a vectorized implementation.

#### **Parameters**

i [DatetimeIndex]

#### Returns

y [DatetimeIndex]

### pandas.tseries.offsets.FY5253.rollback

```
FY5253.rollback (self, dt)
```

Roll provided date backward to next offset only if not on offset.

#### Returns

**TimeStamp** Rolled timestamp if not on offset, otherwise unchanged timestamp.

# pandas.tseries.offsets.FY5253.rollforward

#### FY5253.rollforward(self, dt)

Roll provided date forward to next offset only if not on offset.

#### Returns

**TimeStamp** Rolled timestamp if not on offset, otherwise unchanged timestamp.

call	
apply	
copy	
get_rule_code_suffix	
get_year_end	
isAnchored	
is_anchored	
is_on_offset	
onOffset	

#### **Properties**

FY5253.freqstr		
FY5253.kwds		
FY5253.name		
FY5253.nanos		
FY5253.normalize		
FY5253.rule_code		

pandas.tseries.offsets.FY5253.freqstr

FY5253.freqstr

pandas.tseries.offsets.FY5253.kwds

property FY5253.kwds

pandas.tseries.offsets.FY5253.name

property FY5253.name

pandas.tseries.offsets.FY5253.nanos

property FY5253.nanos

pandas.tseries.offsets.FY5253.normalize

FY5253.normalize = False

pandas.tseries.offsets.FY5253.rule\_code

property FY5253.rule\_code

#### **Methods**

FY5253.apply(self, other)	
FY5253.copy(self)	
FY5253.get_rule_code_suffix(self)	
FY5253.get_year_end(self, dt)	
FY5253.isAnchored(self)	
FY5253.onOffset(self, dt)	
FY5253.is_anchored(self)	
FY5253.is_on_offset(self, dt)	
FY5253call(self, other)	Call self as a function.

```
pandas.tseries.offsets.FY5253.apply
FY5253.apply(self, other)
pandas.tseries.offsets.FY5253.copy
FY5253.copy (self)
pandas.tseries.offsets.FY5253.get_rule_code_suffix
FY5253.get_rule_code_suffix(self)
pandas.tseries.offsets.FY5253.get_year_end
FY5253.get_year_end(self, dt)
pandas.tseries.offsets.FY5253.isAnchored
FY5253.isAnchored(self)
pandas.tseries.offsets.FY5253.onOffset
FY5253.onOffset (self, dt)
pandas.tseries.offsets.FY5253.is anchored
FY5253.is_anchored(self)
pandas.tseries.offsets.FY5253.is_on_offset
FY5253.is_on_offset (self, dt)
pandas.tseries.offsets.FY5253. call
FY5253.__call__(self, other)
    Call self as a function.
```

#### 3.8.30 FY5253Quarter

FY5253Quarter([n, normalize, weekday,])	DateOffset increments between business quarter dates
	for 52-53 week fiscal year (also known as a 4-4-5 calen-
	dar).

#### pandas.tseries.offsets.FY5253Quarter

DateOffset increments between business quarter dates for 52-53 week fiscal year (also known as a 4-4-5 calendar).

It is used by companies that desire that their fiscal year always end on the same day of the week.

It is a method of managing accounting periods. It is a common calendar structure for some industries, such as retail, manufacturing and parking industry.

For more information see: http://en.wikipedia.org/wiki/4-4-5\_calendar

The year may either:

- end on the last X day of the Y month.
- end on the last X day closest to the last day of the Y month.

X is a specific day of the week. Y is a certain month of the year

startingMonth = 1 corresponds to dates like 1/31/2007, 4/30/2007, ... startingMonth = 2 corresponds to dates like 2/28/2007, 5/31/2007, ... startingMonth = 3 corresponds to dates like 3/30/2007, 6/29/2007, ...

#### **Parameters**

n [int]

weekday [int  $\{0, 1, ..., 6\}$ , default 0] A specific integer for the day of the week.

- 0 is Monday
- 1 is Tuesday
- 2 is Wednesday
- 3 is Thursday
- 4 is Friday
- 5 is Saturday
- 6 is Sunday.

**startingMonth** [int  $\{1, 2, ..., 12\}$ , default 1] The month in which fiscal years end.

**qtr\_with\_extra\_week** [int {1, 2, 3, 4}, default 1] The quarter number that has the leap or 14 week when needed.

variation [str, default "nearest"] Method of employing 4-4-5 calendar.

There are two options:

- "nearest" means year end is weekday closest to last day of month in year.
- "last" means year end is final weekday of the final month in fiscal year.

#### **Attributes**

base	Returns a copy of the calling offset object with n=1
	and all other attributes equal.

# pandas.tseries.offsets.FY5253Quarter.base

#### property FY5253Quarter.base

Returns a copy of the calling offset object with n=1 and all other attributes equal.

freqstr	
kwds	
name	
nanos	
rule_code	

#### **Methods**

apply_index(self, other)	Vectorized apply of DateOffset to DatetimeIndex, raises NotImplentedError for offsets without a vectorized implementation.
rollback(self, dt)	Roll provided date backward to next offset only if not on offset.
	not on onset.
rollforward(self, dt)	Roll provided date forward to next offset only if not
	on offset.

#### pandas.tseries.offsets.FY5253Quarter.apply\_index

FY5253Quarter.apply\_index(self, other)

Vectorized apply of DateOffset to DatetimeIndex, raises NotImplentedError for offsets without a vectorized implementation.

#### **Parameters**

i [DatetimeIndex]

#### Returns

y [DatetimeIndex]

## pandas.tseries.offsets.FY5253Quarter.rollback

```
FY5253Quarter.rollback (self, dt)
```

Roll provided date backward to next offset only if not on offset.

# Returns

**TimeStamp** Rolled timestamp if not on offset, otherwise unchanged timestamp.

# pandas.tseries.offsets.FY5253Quarter.rollforward

```
FY5253Quarter.rollforward(self, dt)
```

Roll provided date forward to next offset only if not on offset.

#### **Returns**

**TimeStamp** Rolled timestamp if not on offset, otherwise unchanged timestamp.

call	
apply	
copy	
get_weeks	
isAnchored	
is_anchored	
is_on_offset	
onOffset	
year_has_extra_week	

# **Properties**

FY5253Quarter.freqstr
FY5253Quarter.kwds
FY5253Quarter.name
FY5253Quarter.nanos
FY5253Quarter.normalize
FY5253Quarter.rule_code

#### pandas.tseries.offsets.FY5253Quarter.freqstr

FY5253Quarter.freqstr

## pandas.tseries.offsets.FY5253Quarter.kwds

property FY5253Quarter.kwds

pandas.tseries.offsets.FY5253Quarter.name

property FY5253Quarter.name

pandas.tseries.offsets.FY5253Quarter.nanos

property FY5253Quarter.nanos

pandas.tseries.offsets.FY5253Quarter.normalize

FY5253Quarter.normalize = False

# pandas.tseries.offsets.FY5253Quarter.rule\_code

property FY5253Quarter.rule\_code

#### **Methods**

FY5253Quarter.apply(self, other)	
FY5253Quarter.copy(self)	
FY5253Quarter.get_weeks(self, dt)	
FY5253Quarter.isAnchored(self)	
FY5253Quarter.onOffset(self, dt)	
FY5253Quarter.is_anchored(self)	
FY5253Quarter.is_on_offset(self, dt)	
FY5253Quarter.year_has_extra_week(self,	
dt)	
FY5253Quartercall(self, other)	Call self as a function.

# pandas.tseries.offsets.FY5253Quarter.apply

FY5253Quarter.apply(self, other)

#### pandas.tseries.offsets.FY5253Quarter.copy

FY5253Quarter.copy(self)

## pandas.tseries.offsets.FY5253Quarter.get\_weeks

FY5253Quarter.get\_weeks(self, dt)

#### pandas.tseries.offsets.FY5253Quarter.isAnchored

FY5253Quarter.isAnchored(self)

#### pandas.tseries.offsets.FY5253Quarter.onOffset

FY5253Quarter.onOffset (self, dt)

# pandas.tseries.offsets.FY5253Quarter.is\_anchored

FY5253Quarter.is\_anchored(self)

#### pandas.tseries.offsets.FY5253Quarter.is\_on\_offset

FY5253Quarter.is\_on\_offset (self, dt)

#### pandas.tseries.offsets.FY5253Quarter.year\_has\_extra\_week

 ${\tt FY5253Quarter.year\_has\_extra\_week}~(\textit{self},\textit{dt})$ 

## pandas.tseries.offsets.FY5253Quarter.\_\_call\_\_

FY5253Quarter.\_\_call\_\_(self, other)
Call self as a function.

#### 3.8.31 Easter

Easter([n, normalize]) DateOffset for the Easter holiday using logic defined in dateutil.

#### pandas.tseries.offsets.Easter

class pandas.tseries.offsets.Easter(n=1, normalize=False)

DateOffset for the Easter holiday using logic defined in dateutil.

Right now uses the revised method which is valid in years 1583-4099.

#### **Attributes**

base	Returns a copy of the calling offset object with n=1
	and all other attributes equal.

#### pandas.tseries.offsets.Easter.base

#### property Easter.base

Returns a copy of the calling offset object with n=1 and all other attributes equal.

freqstr	
kwds	
name	
nanos	
rule_code	

#### **Methods**

<pre>apply_index(self, other)</pre>	Vectorized apply of DateOffset to DatetimeIndex,
	raises NotImplentedError for offsets without a vec-
	torized implementation.
rollback(self, dt)	Roll provided date backward to next offset only if
	not on offset.
rollforward(self, dt)	Roll provided date forward to next offset only if not
	on offset.

# pandas.tseries.offsets.Easter.apply\_index

 ${\tt Easter.apply\_index} \ (\textit{self}, \textit{other})$ 

Vectorized apply of DateOffset to DatetimeIndex, raises NotImplentedError for offsets without a vectorized implementation.

### **Parameters**

i [DatetimeIndex]

#### Returns

y [DatetimeIndex]

## pandas.tseries.offsets.Easter.rollback

```
Easter.rollback (self, dt)
```

Roll provided date backward to next offset only if not on offset.

#### Returns

**TimeStamp** Rolled timestamp if not on offset, otherwise unchanged timestamp.

# pandas.tseries.offsets.Easter.rollforward

```
Easter.rollforward(self, dt)
```

Roll provided date forward to next offset only if not on offset.

#### **Returns**

**TimeStamp** Rolled timestamp if not on offset, otherwise unchanged timestamp.

call	
apply	
copy	
isAnchored	
is_anchored	
is_on_offset	
onOffset	

# **Properties**

Easter.freqstr	
Easter.kwds	
Easter.name	
Easter.nanos	
Easter.normalize	
Easter.rule_code	

# pandas.tseries.offsets.Easter.freqstr

 ${\tt Easter.freqstr}$ 

# pandas.tseries.offsets.Easter.kwds

property Easter.kwds

pandas.tseries.offsets.Easter.name

property Easter.name

pandas.tseries.offsets.Easter.nanos

property Easter.nanos

pandas.tseries.offsets.Easter.normalize

Easter.normalize = False

pandas.tseries.offsets.Easter.rule\_code

property Easter.rule\_code

#### **Methods**

Easter.apply(self, other)		
Easter.copy(self)		
Easter.isAnchored(self)		
Easter.onOffset(self, dt)		
Easter.is_anchored(self)		
Easter.is_on_offset(self, dt)		
Eastercall(self, other)	Call self as a function.	

# pandas.tseries.offsets.Easter.apply

Easter.apply(self, other)

# pandas.tseries.offsets.Easter.copy

Easter.copy(self)

# pandas.tseries.offsets.Easter.isAnchored

Easter.isAnchored(self)

# pandas.tseries.offsets.Easter.onOffset

Easter.onOffset (self, dt)

# pandas.tseries.offsets.Easter.is\_anchored

Easter.is\_anchored(self)

# pandas.tseries.offsets.Easter.is\_on\_offset

Easter.is\_on\_offset (self, dt)

# pandas.tseries.offsets.Easter.\_\_call\_\_

Easter.\_\_call\_\_(self, other)
Call self as a function.

# 3.8.32 Tick

Tick([n, normalize])

### **Attributes**

# pandas.tseries.offsets.Tick

class pandas.tseries.offsets.Tick(n=1, normalize=False)

#### **Attributes**

base	Returns a copy of the calling offset object with n=1
	and all other attributes equal.

# pandas.tseries.offsets.Tick.base

## property Tick.base

Returns a copy of the calling offset object with n=1 and all other attributes equal.

delta	
freqstr	
kwds	
name	
nanos	
rule_code	

#### **Methods**

apply(self, other)	
apply_index(self, other)	Vectorized apply of DateOffset to DatetimeIndex,
	raises NotImplentedError for offsets without a vec-
	torized implementation.
rollback(self, dt)	Roll provided date backward to next offset only if
	not on offset.
rollforward(self, dt)	Roll provided date forward to next offset only if not
	on offset.

#### pandas.tseries.offsets.Tick.apply

Tick.apply(self, other)

# pandas.tseries.offsets.Tick.apply\_index

#### Tick.apply\_index(self, other)

Vectorized apply of DateOffset to DatetimeIndex, raises NotImplentedError for offsets without a vectorized implementation.

#### **Parameters**

i [DatetimeIndex]

#### Returns

y [DatetimeIndex]

## pandas.tseries.offsets.Tick.rollback

Tick.rollback(self, dt)

Roll provided date backward to next offset only if not on offset.

#### Returns

**TimeStamp** Rolled timestamp if not on offset, otherwise unchanged timestamp.

# pandas.tseries.offsets.Tick.rollforward

Tick.rollforward(self, dt)

Roll provided date forward to next offset only if not on offset.

#### **Returns**

**TimeStamp** Rolled timestamp if not on offset, otherwise unchanged timestamp.

call	
copy	
isAnchored	
is_anchored	
is_on_offset	
onOffset	

# **Properties**

Tick.delta		
Tick.freqstr		
Tick.kwds		
Tick.name		
Tick.nanos		
Tick.normalize		
Tick.rule_code		

# pandas.tseries.offsets.Tick.delta

property Tick.delta

# pandas.tseries.offsets.Tick.freqstr

Tick.freqstr

pandas.tseries.offsets.Tick.kwds

property Tick.kwds

pandas.tseries.offsets.Tick.name

property Tick.name

pandas.tseries.offsets.Tick.nanos

property Tick.nanos

pandas.tseries.offsets.Tick.normalize

Tick.normalize = False

pandas.tseries.offsets.Tick.rule\_code

property Tick.rule\_code

#### Methods

Tick.copy(self)		
Tick.isAnchored(self)		
Tick.onOffset(self, dt)		
Tick.is_anchored(self)		
Tick.is_on_offset(self, dt)		
Tickcall(self, other)	Call self as a function.	

# pandas.tseries.offsets.Tick.copy

Tick.copy(self)

# pandas.tseries.offsets.Tick.isAnchored

Tick.isAnchored(self)

# pandas.tseries.offsets.Tick.onOffset

Tick.onOffset (self, dt)

# pandas.tseries.offsets.Tick.is\_anchored

Tick.is\_anchored(self)

# pandas.tseries.offsets.Tick.is\_on\_offset

Tick.is\_on\_offset (self, dt)

# pandas.tseries.offsets.Tick.\_\_call\_\_

Tick.\_\_call\_\_(self, other)
Call self as a function.

# 3.8.33 Day

Day([n, normalize])

#### **Attributes**

# pandas.tseries.offsets.Day

class pandas.tseries.offsets.Day(n=1, normalize=False)

#### **Attributes**

base	Returns a copy of the calling offset object with n=1
	and all other attributes equal.

# pandas.tseries.offsets.Day.base

## property Day.base

Returns a copy of the calling offset object with n=1 and all other attributes equal.

delta	
freqstr	
kwds	
name	
nanos	
rule_code	

# **Methods**

apply(self, other)	
apply_index(self, other)	Vectorized apply of DateOffset to DatetimeIndex, raises NotImplentedError for offsets without a vec-
	torized implementation.
rollback(self, dt)	Roll provided date backward to next offset only if
	not on offset.
rollforward(self, dt)	Roll provided date forward to next offset only if not
	on offset.

# pandas.tseries.offsets.Day.apply

Day.apply(self, other)

# pandas.tseries.offsets.Day.apply\_index

# Day.apply\_index(self, other)

Vectorized apply of DateOffset to DatetimeIndex, raises NotImplentedError for offsets without a vectorized implementation.

#### **Parameters**

i [DatetimeIndex]

#### Returns

y [DatetimeIndex]

# pandas.tseries.offsets.Day.rollback

Day.rollback (self, dt)

Roll provided date backward to next offset only if not on offset.

#### Returns

**TimeStamp** Rolled timestamp if not on offset, otherwise unchanged timestamp.

# pandas.tseries.offsets.Day.rollforward

Day.rollforward(self, dt)

Roll provided date forward to next offset only if not on offset.

#### **Returns**

**TimeStamp** Rolled timestamp if not on offset, otherwise unchanged timestamp.

call	
copy	
isAnchored	
is_anchored	
is_on_offset	
onOffset	

# **Properties**

Day.delta		
Day.freqstr		
Day.kwds		
Day.name		
Day.nanos		
Day.normalize		
Day.rule_code		

# pandas.tseries.offsets.Day.delta

property Day.delta

# pandas.tseries.offsets.Day.freqstr

Day.freqstr

pandas.tseries.offsets.Day.kwds

property Day.kwds

pandas.tseries.offsets.Day.name

property Day.name

pandas.tseries.offsets.Day.nanos

property Day.nanos

pandas.tseries.offsets.Day.normalize

Day.normalize = False

pandas.tseries.offsets.Day.rule\_code

property Day.rule\_code

#### Methods

Day.copy(self)	
Day.isAnchored(self)	
Day.onOffset(self, dt)	
Day.is_anchored(self)	
Day.is_on_offset(self, dt)	
Daycall(self, other)	Call self as a function.

# pandas.tseries.offsets.Day.copy

Day.copy(self)

# pandas.tseries.offsets.Day.isAnchored

Day.isAnchored(self)

# pandas.tseries.offsets.Day.onOffset

Day.onOffset (self, dt)

# pandas.tseries.offsets.Day.is\_anchored

Day.is\_anchored(self)

# pandas.tseries.offsets.Day.is\_on\_offset

Day.is\_on\_offset (self, dt)

# pandas.tseries.offsets.Day.\_\_call\_\_

Day.\_\_call\_\_(self, other)
Call self as a function.

# 3.8.34 Hour

Hour([n, normalize])

#### **Attributes**

#### pandas.tseries.offsets.Hour

class pandas.tseries.offsets.Hour(n=1, normalize=False)

#### **Attributes**

base	Returns a copy of the calling offset object with n=1
	and all other attributes equal.

## pandas.tseries.offsets.Hour.base

#### property Hour.base

Returns a copy of the calling offset object with n=1 and all other attributes equal.

delta	
freqstr	
kwds	
name	
nanos	
rule_code	

# **Methods**

apply(self, other)	
apply_index(self, other)	Vectorized apply of DateOffset to DatetimeIndex, raises NotImplentedError for offsets without a vec-
	torized implementation.
rollback(self, dt)	Roll provided date backward to next offset only if
	not on offset.
rollforward(self, dt)	Roll provided date forward to next offset only if not
	on offset.

# pandas.tseries.offsets.Hour.apply

Hour.apply (self, other)

# pandas.tseries.offsets.Hour.apply\_index

Hour.apply\_index(self, other)

Vectorized apply of DateOffset to DatetimeIndex, raises NotImplentedError for offsets without a vectorized implementation.

#### **Parameters**

i [DatetimeIndex]

#### Returns

y [DatetimeIndex]

## pandas.tseries.offsets.Hour.rollback

```
Hour.rollback (self, dt)
```

Roll provided date backward to next offset only if not on offset.

#### Returns

**TimeStamp** Rolled timestamp if not on offset, otherwise unchanged timestamp.

# pandas.tseries.offsets.Hour.rollforward

```
Hour.rollforward(self, dt)
```

Roll provided date forward to next offset only if not on offset.

#### **Returns**

**TimeStamp** Rolled timestamp if not on offset, otherwise unchanged timestamp.

call	
copy	
isAnchored	
is_anchored	
is_on_offset	
onOffset	

# **Properties**

Hour.delta	
Hour.freqstr	
Hour.kwds	
Hour.name	
Hour.nanos	
Hour.normalize	
Hour.rule_code	

# pandas.tseries.offsets.Hour.delta

property Hour.delta

# pandas.tseries.offsets.Hour.freqstr

Hour.freqstr

pandas.tseries.offsets.Hour.kwds

property Hour.kwds

pandas.tseries.offsets.Hour.name

property Hour.name

pandas.tseries.offsets.Hour.nanos

property Hour.nanos

pandas.tseries.offsets.Hour.normalize

Hour.normalize = False

pandas.tseries.offsets.Hour.rule\_code

property Hour.rule\_code

#### **Methods**

Hour.copy(self)		
Hour.isAnchored(self)		
Hour.onOffset(self, dt)		
Hour.is_anchored(self)		
Hour.is_on_offset(self, dt)		
Hourcall(self, other)	Call self as a function.	

# pandas.tseries.offsets.Hour.copy

Hour.copy(self)

# pandas.tseries.offsets.Hour.isAnchored

Hour.isAnchored(self)

# pandas.tseries.offsets.Hour.onOffset

Hour.onOffset (self, dt)

### pandas.tseries.offsets.Hour.is\_anchored

Hour.is\_anchored(self)

# pandas.tseries.offsets.Hour.is\_on\_offset

Hour.is\_on\_offset (self, dt)

# pandas.tseries.offsets.Hour.\_\_call\_\_

Hour.\_\_call\_\_ (self, other)
Call self as a function.

# 3.8.35 Minute

Minute([n, normalize])

#### **Attributes**

#### pandas.tseries.offsets.Minute

class pandas.tseries.offsets.Minute(n=1, normalize=False)

#### **Attributes**

base	Returns a copy of the calling offset object with n=1
	and all other attributes equal.