Dates and Times

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Reading in CSV for Central Park Temps

```
library("readr")
prices <- read_csv("http://richardtwatson.com/data/electricityprices.csv")
```

```
head(prices)
```

```
## # A tibble: 6 x 2
##   timestamp            cost
##   <dttm>              <dbl>
## 1 2010-01-01 00:00:00  6.49
## 2 2010-01-01 01:00:00  5.54
## 3 2010-01-01 02:00:00  6.50
## 4 2010-01-01 03:00:00  6.54
## 5 2010-01-01 04:00:00  5.65
## 6 2010-01-01 05:00:00  6.56
```

Create a random subset of 10 rows using the code shown below.

```
library("dplyr")
```

Generate a random sample of 10 row from the table temps.

```
sampleprices <- sample_n(prices, 10)
```

Manipulating Dates and Times

```
library("lubridate")
```

Year

```
year(sampleprices$timestamp)
```

```
##  [1] 2014 2014 2013 2010 2011 2014 2015 2014 2015 2011
```

Month

```
month(sampleprices$timestamp)
```

```
##  [1]  4  5  4  2  4 10 12 12 10 11
```

Day in month

```
days_in_month(sampleprices$timestamp)
```

```
## Apr May Apr Feb Apr Oct Dec Dec Oct Nov
##  30  31  30  28  30  31  31  31  31  30
```

Day in week as a number

```
wday(sampleprices$timestamp)
```

```
##  [1] 4 1 4 4 3 4 7 5 5 7
```

Day in week as a string

```
weekdays(sampleprices$timestamp)
```

```
##  [1] "Wednesday" "Sunday"    "Wednesday" "Wednesday" "Tuesday"
##  [6] "Wednesday" "Saturday"  "Thursday"  "Thursday"  "Saturday"
```

Hour

```
hour(sampleprices$timestamp)
```

```
##  [1] 22 16 22  5  1  9 10 14  5  2
```

Which years are leap years

```
leap_year(sampleprices$timestamp)
```

```
##  [1] FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE FALSE
```