> str(yr\_2006)

'data.frame': 21992 obs. of 5 variables:

$ Date : chr "2006-12-16" "2006-12-16" "2006-12-16" "2006-12-16" ...

$ Time : chr "17:24:00" "17:25:00" "17:26:00" "17:27:00" ...

$ Sub\_metering\_1: num 0 0 0 0 0 0 0 0 0 0 ...

$ Sub\_metering\_2: num 1 1 2 1 1 2 1 1 1 2 ...

$ Sub\_metering\_3: num 17 16 17 17 17 17 17 17 17 16 ...

From 1 2006-12-16 17:24:00 0 1 17

To 21987 2006-12-31 23:54:00 0 0 0

> str(yr\_2007)

'data.frame': 521669 obs. of 5 variables:

$ Date : chr "2007-01-01" "2007-01-01" "2007-01-01" "2007-01-01" ...

$ Time : chr "00:00:00" "00:01:00" "00:02:00" "00:03:00" ...

$ Sub\_metering\_1: num 0 0 0 0 0 0 0 0 0 0 ...

$ Sub\_metering\_2: num 0 0 0 0 0 0 0 0 0 0 ...

$ Sub\_metering\_3: num 0 0 0 0 0 0 0 0 0 0 ...

From 2007-01-01 00:00:00 0 0 0

To 521664 2007-12-31 23:54:00 0 0 18

> str(yr\_2008)

'data.frame': 526905 obs. of 5 variables:

$ Date : chr "2008-01-01" "2008-01-01" "2008-01-01" "2008-01-01" ...

$ Time : chr "00:00:00" "00:01:00" "00:02:00" "00:03:00" ...

$ Sub\_metering\_1: num 0 0 0 0 0 0 0 0 0 0 ...

$ Sub\_metering\_2: num 0 0 0 0 0 0 0 0 0 0 ...

$ Sub\_metering\_3: num 18 18 18 18 18 17 18 18 18 18 ...

1 2008-01-01 00:00:00 0 0 18

526900 2008-12-31 23:54:00 0 0 0

> str(yr\_2009)

'data.frame': 521320 obs. of 5 variables:

$ Date : chr "2009-01-01" "2009-01-01" "2009-01-01" "2009-01-01" ...

$ Time : chr "00:00:00" "00:01:00" "00:02:00" "00:03:00" ...

$ Sub\_metering\_1: num 0 0 0 0 0 0 0 0 0 0 ...

$ Sub\_metering\_2: num 0 0 0 0 0 0 0 0 0 0 ...

$ Sub\_metering\_3: num 0 0 0 0 0 0 0 0 0 0 ...

1 2009-01-01 00:00:00 0 0 0

521315 2009-12-31 23:54:00 0 0 18

> str(yr\_2010)

'data.frame': 457394 obs. of 5 variables:

$ Date : chr "2010-01-01" "2010-01-01" "2010-01-01" "2010-01-01" ...

$ Time : chr "00:00:00" "00:01:00" "00:02:00" "00:03:00" ...

$ Sub\_metering\_1: num 0 0 0 0 0 0 0 0 0 0 ...

$ Sub\_metering\_2: num 0 0 0 0 0 0 0 0 0 0 ...

$ Sub\_metering\_3: num 18 18 19 18 18 19 18 18 19 18 ...

1 2010-01-01 00:00:00 0 0 18

457389 2010-11-26 20:57:00 0 0 0

> summary(newDF)

DateTime Date Time Sub\_metering\_1

Min. :2006-12-16 18:24:00 Length:2049280 Length:2049280 Min. : 0.000

1st Qu.:2007-12-10 06:37:45 Class :character Class :character 1st Qu.: 0.000

Median :2008-11-30 02:22:30 Mode :character Mode :character Median : 0.000

Mean :2008-12-02 01:59:44 Mean : 1.122

3rd Qu.:2009-11-23 21:31:15 3rd Qu.: 0.000

Max. :2010-11-26 22:02:00 **Max. : 88.000**

Sub\_metering\_2 Sub\_metering\_3 year month day

Min. : 0.000 Min. : 0.000 Min. : 2006 Min. : 1.000 Min. : 1.00

1st Qu.: 0.000 1st Qu.: 0.000 1st Qu.:2007 1st Qu.: 3.000 1st Qu.: 8.00

Median : 0.000 Median : 1.000 Median :2008 Median : 6.000 Median :16.00

Mean : 1.299 Mean : 6.458 Mean : 2008 Mean : 6.455 Mean :15.71

3rd Qu.: 1.000 3rd Qu.:17.000 3rd Qu.:2009 3rd Qu.: 9.000 3rd Qu.:23.00

Max. :80.000 **Max. : 31.000** Max. : 2010 Max. : 12.000 Max. : 31.00

hour minute quarter week weekday

Min. : 0.0 Min. : 0.0 Min. :1.00 Min. : 1.00 Length:2049280

1st Qu.: 5.0 1st Qu.:15.0 1st Qu.:1.00 1st Qu.:13.00 Class :character

Median :12.0 Median :30.0 Median :2.00 Median :26.00 Mode :character

Mean :11.5 Mean :29.5 Mean :2.49 Mean :26.29

3rd Qu.:18.0 3rd Qu.:45.0 3rd Qu.:3.00 3rd Qu.:39.00

Max. :23.0 Max. :59.0 Max. :4.00 Max. :53.00

\* Which sub-meter is using the most power?

The least?

Is there anything to learn from the max and min?

\* Thought Starter: If you could add more information to the data set, what kinds of attributes would you add? What would be important to understanding the power usage in this home?  
\* Thought Starter: Should the appliances on the sub-meters be grouped the way they are currently grouped? Could more information be gained if some were separated?  
\* Your mentor will assist you with this objective during your team meetings.