Reproducible Research: Peer Assessment 1

Loading and preprocessing the data

```r
library(data.table)
dt_data <- data.table(read.table(unz("activity.zip", "activity.csv"), header=T, quote="\"", sep=","))
```

What is mean total number of steps taken per day?

```r
aggregate(dt_data[, 1], list(dt_data$date), mean)
```

```
##        Group.1       steps
## 1   2012-10-01          NA
## 2   2012-10-02   0.4375000
## 3   2012-10-03  39.4166667
## 4   2012-10-04  42.0694444
## 5   2012-10-05  46.1597222
## 6   2012-10-06  53.5416667
## 7   2012-10-07  38.2465278
## 8   2012-10-08          NA
## 9   2012-10-09  44.4826389
## 10  2012-10-10  34.3750000
## 11  2012-10-11  35.7777778
## 12  2012-10-12  60.3541667
## 13  2012-10-13  43.1458333
## 14  2012-10-14  52.4236111
## 15  2012-10-15  35.2048611
## 16  2012-10-16  52.3750000
## 17  2012-10-17  46.7083333
## 18  2012-10-18  34.9166667
## 19  2012-10-19  41.0729167
## 20  2012-10-20  36.0937500
## 21  2012-10-21  30.6284722
## 22  2012-10-22  46.7361111
## 23  2012-10-23  30.9652778
## 24  2012-10-24  29.0104167
## 25  2012-10-25   8.6527778
## 26  2012-10-26  23.5347222
## 27  2012-10-27  35.1354167
## 28  2012-10-28  39.7847222
## 29  2012-10-29  17.4236111
## 30  2012-10-30  34.0937500
## 31  2012-10-31  53.5208333
## 32  2012-11-01          NA
## 33  2012-11-02  36.8055556
## 34  2012-11-03  36.7048611
## 35  2012-11-04          NA
## 36  2012-11-05  36.2465278
## 37  2012-11-06  28.9375000
## 38  2012-11-07  44.7326389
```

```
## 39 2012-11-08 11.1770833
## 40 2012-11-09        NA
## 41 2012-11-10        NA
## 42 2012-11-11 43.7777778
## 43 2012-11-12 37.3784722
## 44 2012-11-13 25.4722222
## 45 2012-11-14        NA
## 46 2012-11-15  0.1423611
## 47 2012-11-16 18.8923611
## 48 2012-11-17 49.7881944
## 49 2012-11-18 52.4652778
## 50 2012-11-19 30.6979167
## 51 2012-11-20 15.5277778
## 52 2012-11-21 44.3993056
## 53 2012-11-22 70.9270833
## 54 2012-11-23 73.5902778
## 55 2012-11-24 50.2708333
## 56 2012-11-25 41.0902778
## 57 2012-11-26 38.7569444
## 58 2012-11-27 47.3819444
## 59 2012-11-28 35.3576389
## 60 2012-11-29 24.4687500
## 61 2012-11-30        NA
```

```
# Codigo alternativo:
# mean(dt_data[date=="2012-10-01",]$steps,na.rm = T)
```

What is the average daily activity pattern?

Imputing missing values

Are there differences in activity patterns between weekdays and weekends?

1, 2,3, probando, probando.