Reproducible Research: Peer Assessment 1

Loading and preprocessing the data

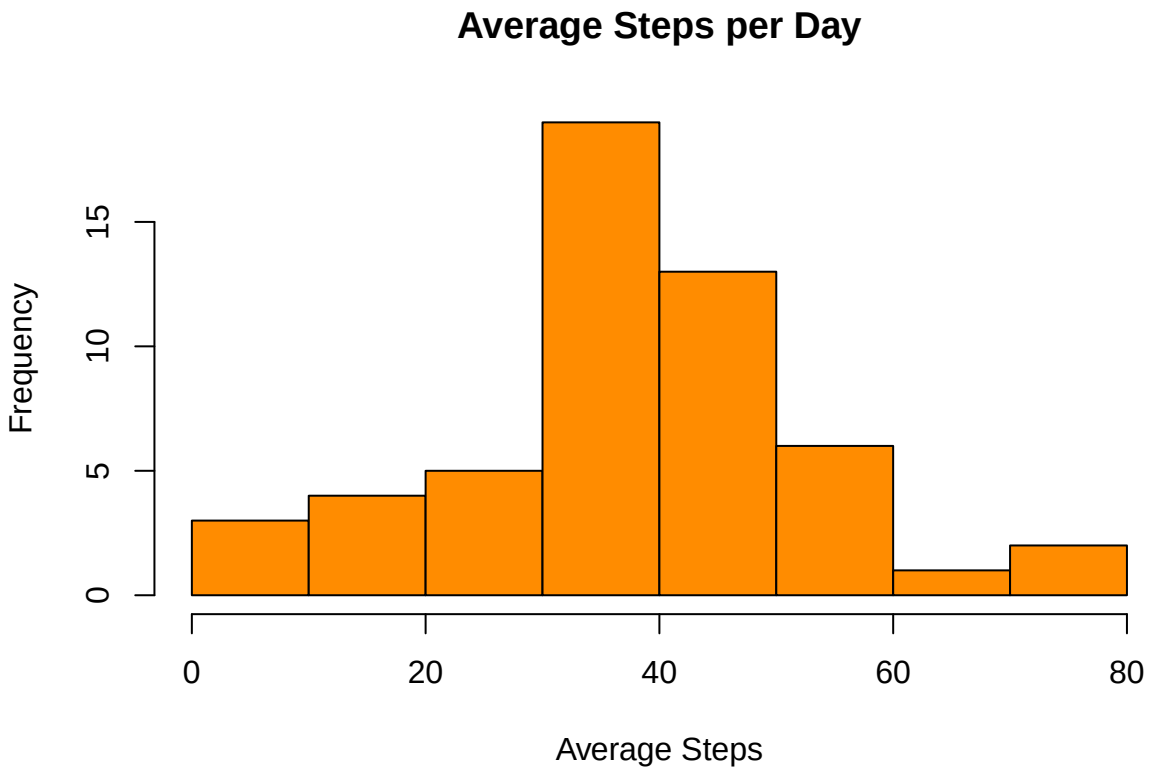
Unzip "activity.zip" file–assumed to be on the working directory read file, gather complete cases and convert dates from strings into date objects:

```
file <- unzip("activity.zip")
       steps <- read.csv(file)
       steps <- steps[complete.cases(steps),]
       steps$date<-as.Date(steps$date)
```

What is mean total number of steps taken per day?

generate histogram of steps and calculate mean Iand median steps per day

```
       daily.steps <-aggregate(steps~date,steps,mean)[,2]
       hist(daily.steps, main = "Average Steps per Day", xlab = "Average Steps", col="darkorange")
```



```
        mean(daily.steps)
```

```
## [1] 37.38
```

```
        median(daily.steps)
```

```
## [1] 37.38
```

What is the average daily activity pattern?

Imputing missing values

Are there differences in activity patterns between weekdays and weekends?