2.3 Introduction to R

2023-05-12
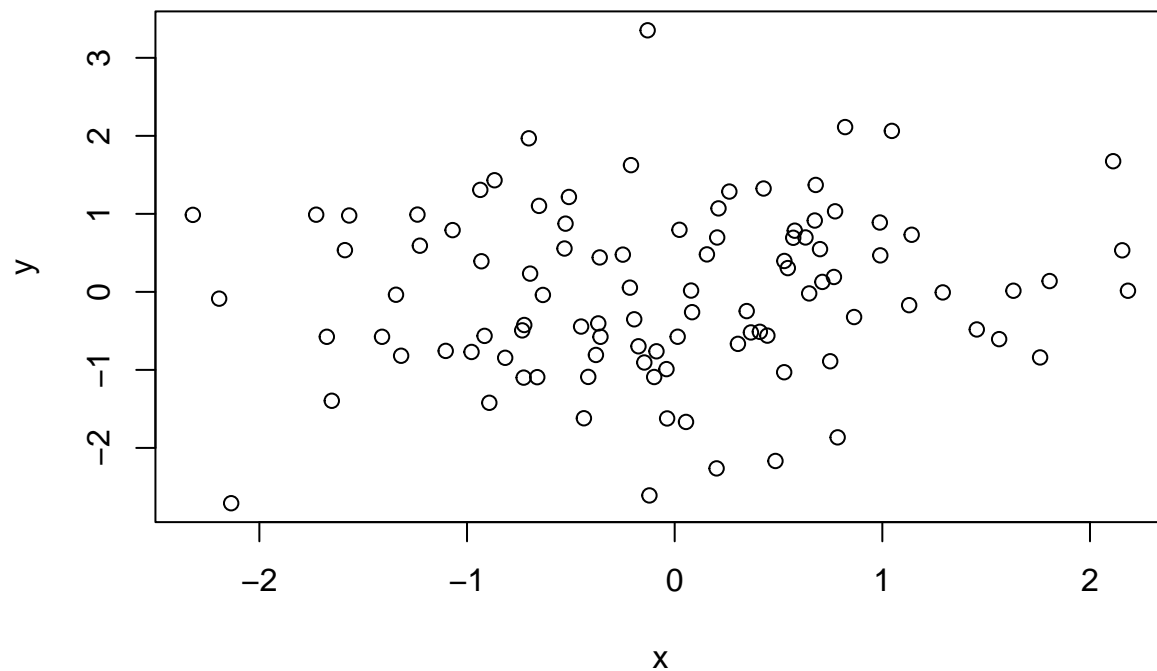
2.3 Introduction to R

2.3.1 Basic Commands

I skipped this part

2.3.2 Graphics

`plot()` is the primary way to plot data in R

```r
x = rnorm(100)
y = rnorm(100)
plot(x,y)
```



```r
pdf("Figure.pdf")
plot(x, y, col="green")
```

2.3.3 Indexing Data
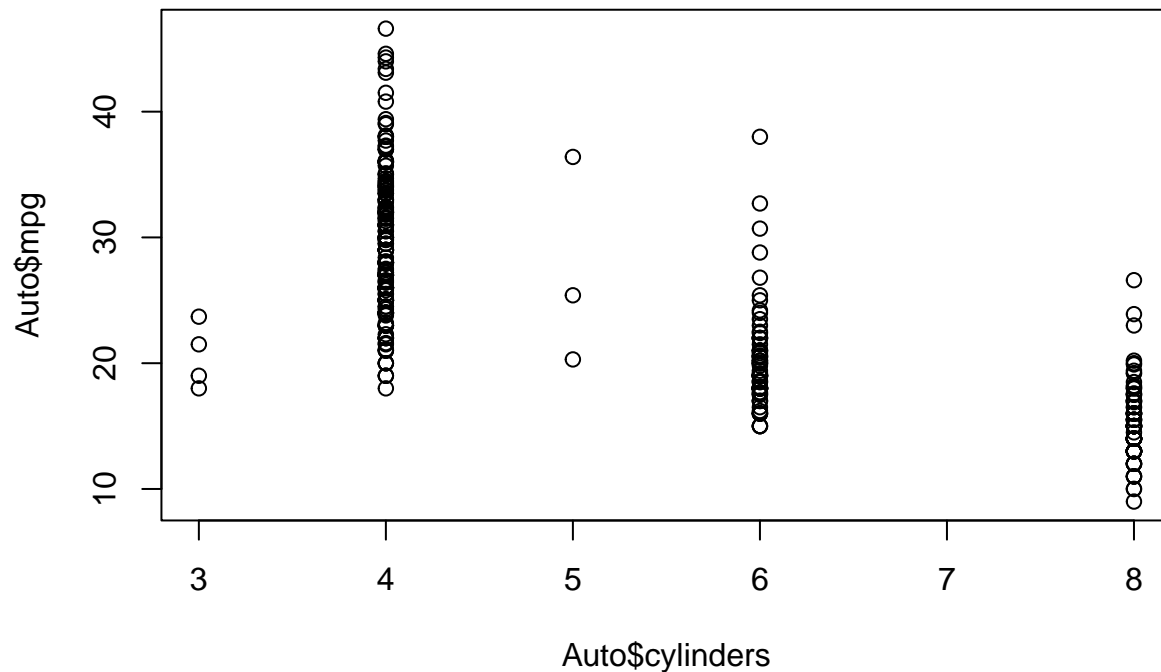
I skipped this part

2.3.4 Loading Data

- `read.table()` to import data set

- `write.table()` to export data set
- `fix()` to view the data in a spreadsheet format
- `read.csv()` to import csv format data
- `dim()` to see the dimension of the data set
- `na.omit()` to remove NAs

2.3.5 Additional Graphics and Numerical Summaries

`plot()` function can be used to plot the variables, however, to refer to a variable, we must tell the system the data set using `$` or `attach()`

```
library(MASS)
library(ISLR)
plot(Auto$cylinders, Auto$mpg)
```



```
attach(Auto)
```

There are also other functions that we can use

- `pairs()` to draw scatterplot matrix
- `hist()` to draw histograms
- `summary()` to produce summary of each variable in the data set