

# Plotting with R

This is a do it your self exercise, meaning that the exercise will give general instructions and very little code.

1. Illustrate the correlation between breaking distance and speed for cars [data: cars]
2. make a boxplot that shows the relation ship between number of cylinders (cyl) and horsepower (hp) [data: mtcars]
3. Illustrate the distribution of North American rivers lengths. [data: rivers]
4. Show the relationship between religion (Catholic) and percent farmers (Agriculture) (data: swiss). Plot the location name (use: rowname()).
5. Show the increase in telephones from 1951 to 1961. Indicating the different “continents” contribution to this (barplot). You want each bar to illustrate a year.
6. Add a legend that indicate the color of the different continents.
7. Change the colors of the barplot (rainbow())
8. Make a map that illustrate the number of assaults per state (data: USArrests). Here is a bit of code:

```
require(maps)
map('state', region = c(row.names(USArrests)),
    col=cm.colors(30) [floor(USArrests$Assault/max(USArrests$Assault)*10)],
    fill=TRUE)
```

Now, make a similar plot of the UrbanPop (data: USArrests), next to this one (use par).