

# STA 4320 CHAP 2

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In this class, we follow the textbook: Introduction to Statistical Learning (2023 June)

## Sec 2.1

Advertising dataset

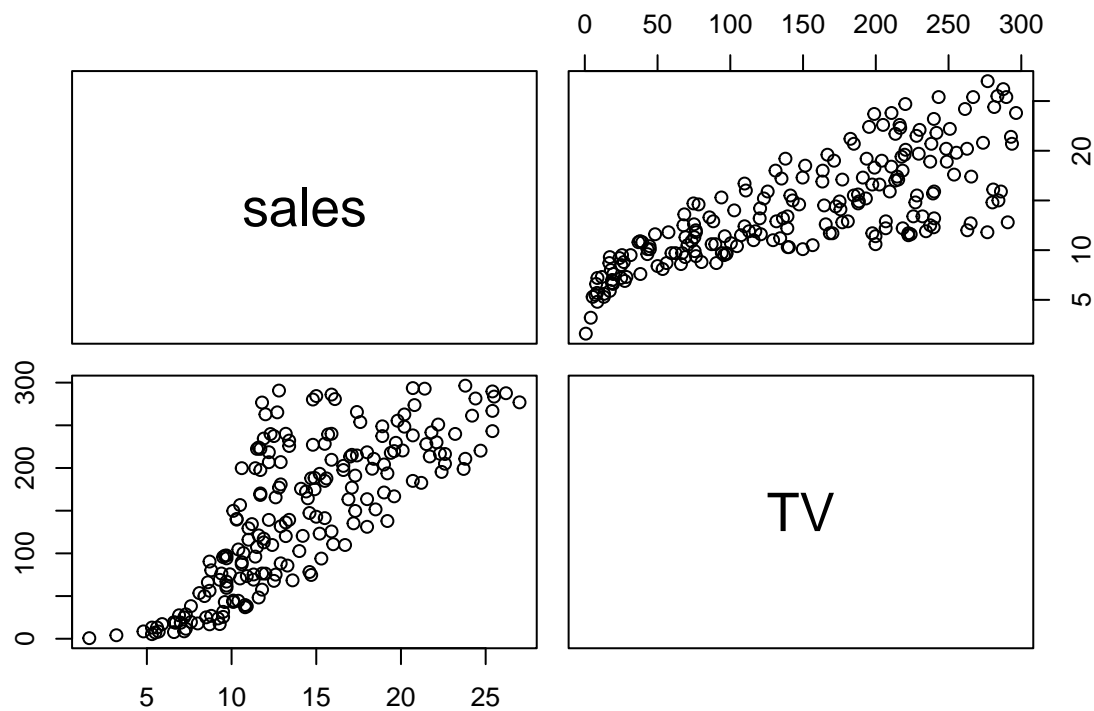
```
fpath = getwd()
Advertising = read.csv(paste0(fpath, "/Advertising.csv"))
head(Advertising)
```

```
##      X      TV radio newspaper sales
## 1 1 230.1  37.8      69.2  22.1
## 2 2  44.5  39.3      45.1  10.4
## 3 3  17.2  45.9      69.3   9.3
## 4 4 151.5  41.3      58.5  18.5
## 5 5 180.8  10.8      58.4  12.9
## 6 6   8.7  48.9      75.0   7.2
```

Pairwise scatterplot of sales vs TV

```
# pairs(Advertising) plots all pairwise scatterplots

# the following only plots pairs that we need
pairs(~sales + TV, data = Advertising)
```



```
# alternatively, we can manually plot the scatterplot
plot(Advertising$TV, Advertising$sales,
     main = "Scatterplot of Sales vs TV Spendings",
     pch = 16,
     xlab = "TV Spendings (in thousand dollars)",
     ylab = "Sales (in thousand units)")
```

**Scatterplot of Sales vs TV Spendings**

