

# Formazione - Giorno 1

## Intro

```
1+1

c(1,2,6)

c(3, 6, 9) + c(1,2,6)

vec <- c(1, 2, 6)

vec

char_vec <- c("a", "b", "a", "a", "b")

# fac_vec <- as.factor(char_vec)
```

## Libraries

```
library(readxl)
```

## Data reading - XLS

```
mdata <- read_excel("media-data.xlsx")
```

## Basic data exploration

```
str(mdata)
```

```
#View(mdata)
```

```
summary(mdata)
```

## Graphic exploration

```
library(ggplot2)
```

## Line

```
qplot(x = Start, y = Qty, data = mdata, geom = "line")
```

## Point

```
qplot(x = Start, y = Qty, data = mdata, geom = "point")
```

## Histogram

```
qplot(x = Tv_30, data = mdata, geom = "histogram")
```

## Data manipulation

```
library(dplyr)
```

### Select

```
radio_data <- mdata %>%  
  select(Week, Qty, Radio_15, Radio_30)
```

```
digital_data <- mdata %>%  
  select(Week, Qty, starts_with("Digital"))
```

```
digital_data <- mdata %>%  
  select(-DigitalNative)
```

```
digital_data <- mdata %>%  
  select(-`Digital Search`)
```

### Filter

```
grp_tv <- mdata %>%  
  filter(TV_15 > 2)
```

```
qplot(data = grp_tv, x = TV_15, bins = 50)
```

```
mdata_2018 <- mdata %>%  
  filter(Start >= "2018-01-01")
```

```
qplot(data = mdata_2018, x = Start, y = Qty, geom = "line")
```