# R Bootcamp

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### Installing R

If you don't have them already installed you need to download and install R and R studio

- Download R
- R Studio

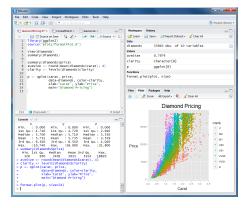
# Topics we will be covering

#### Introduction to R

- R is an open source programming environment
- It is most commonly used for statistical computing and graphics
- The basic functionality of R can be extended with 'packages'

#### Introduction to R studio

• R studio is an IDE within which you can write/edit code, run code, display plots/graphics and a whole host of other functions



#### **Getting Started**

- Download and open the RBootcamp.R file from my GitHub Folder
- The rest of the information on the slides, after the next one, is all within the R file

#### Running code in R

- To run any line of code use (Ctrl) / (Cmd) + (Enter)
  - R will run the highlighted code OR
  - R will run the line of code which the cursor is on

# Mathematical Operators

 $-sqrt(25) + (5 + 3)/4 * 7 - 2^2$ 

## [1] 2

```
## [1] 5
5%/%3 # Integer Division
## [1] 1
5%%3 # Modulo (remainder after division)
```

# **Boolean Operators**

## [1] TRUE

```
5 == 6
## [1] FALSE
5!= 6
## [1] TRUE
83 > = (25 < 23)
## [1] TRUE
(5 > 3) & (3 > 2 | 4 > 1)
```

## Slide with R Output

#### summary(cars)

```
##
       speed
                      dist
   Min. : 4.0
                 Min. : 2.00
##
   1st Qu.:12.0
                 1st Qu.: 26.00
##
##
   Median :15.0
                 Median: 36.00
##
   Mean :15.4
                 Mean : 42.98
##
   3rd Qu.:19.0
                 3rd Qu.: 56.00
                 Max. :120.00
##
   Max. :25.0
```

## Slide with Plot

