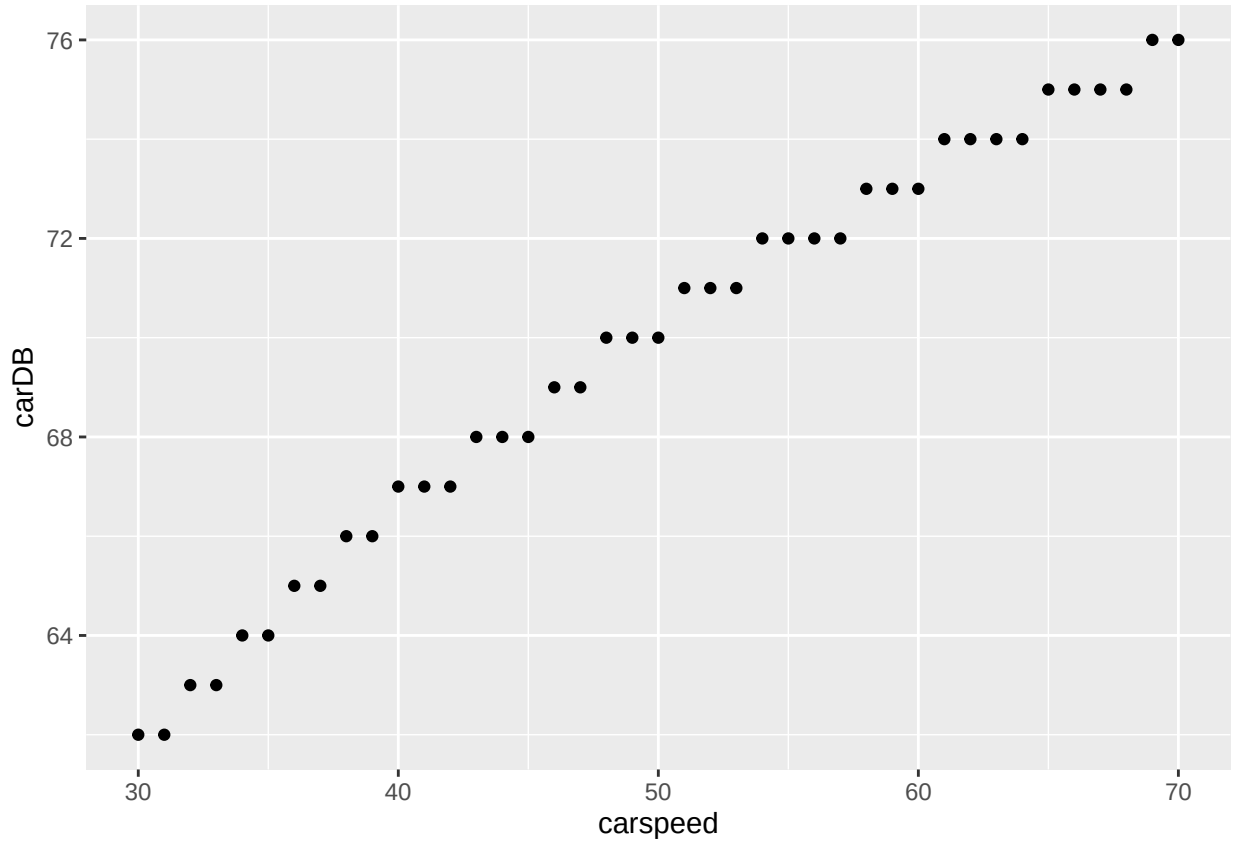
Testing

2022-11-17

```
set.seed(400)
library(bootstrap)
library(ggplot2)
```

```
carDB <- c(62,62,63,63,64,64,65,65,66,66,67,67,67,68,68,68,69,69,70,70,70,71,71,71,72,72,72,72,73,73,73
carspeed <- c(30:70)
carinfo <- data.frame(carspeed) |> cbind(carDB)

ggplot() +
  geom_point(aes(carspeed, carDB), data = carinfo)
```




```
## -----------------------------------------------------------------------
# set up the bootstrap
B <- 1000
n <- nrow(carinfo)

for(b in seq_len(B)) {
  ## Your Turn: Do the bootstrap!
```

```
  ## get bs dataset
  idx_star <- sample(seq_len(n), n, replace = TRUE)
  x_star <- carinfo[idx_star,]
}
```

```
n <- 41

set.seed(400)
carfunction <- function(n){
  dB <- x_star$carDB
  Mj <- runif(n,8.5*45,8.5*65)
  ESDB <- (Mj)/(dB)
  return(ESDB)
}

carfunction(n)
```

```
##  [1] 5.999933 5.594822 7.137165 5.926413 8.315917 6.091938 6.739022 6.409627
##  [9] 6.500287 6.744898 5.299671 6.980106 7.018953 7.388750 7.426663 6.776394
## [17] 7.418757 7.074358 6.151079 7.231975 6.566774 6.764160 7.067872 8.035344
## [25] 5.225779 6.103990 6.238062 8.573176 6.106645 6.029566 6.708210 6.449031
## [33] 6.265380 7.161580 5.784249 7.923530 6.901880 6.921087 6.487544 7.208907
## [41] 7.000836
```