

STATS 205: Homework Assignment 6

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Solution to Problem 1

```
library(datasets)
data(cars)
head(cars)
```

```
##   speed dist
## 1     4     2
## 2     4    10
## 3     7     4
## 4     7    22
## 5     8    16
## 6     9    10
```

```
cars.supsmu = supsmu(cars$speed, cars$dist, bass = 0, span = "cv")
cars.supsmu2= supsmu(cars$speed, cars$dist, bass = 0, span = .30)
cars.supsmu3= supsmu(cars$speed, cars$dist, bass = 0, span = .05)
```

```
plot(x = cars$speed, y = cars$dist, main = "Stopping distances for various speeds", xlab = "Speed", ylab = "Stopping Distance",
     lines(x = cars.supsmu$x, y = cars.supsmu$y, col = "green"),
     legend(5, 110, legend=c("Super Smoothed Cars Data with 'cv' span"),
           col=c("green"), lty=1:1, cex=0.8))
```

Stopping distances for various speeds

