Untitled

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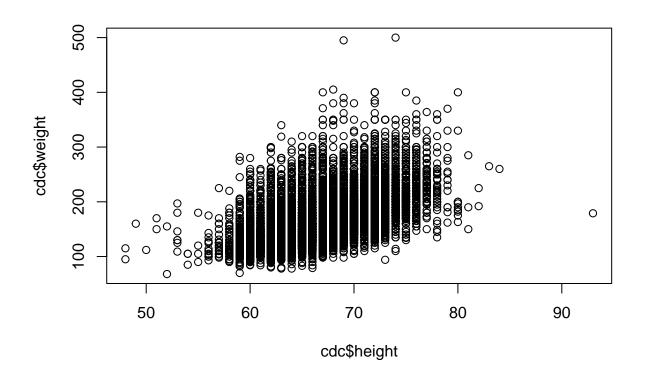
source("http://thegrantlab.org/misc/cdc.R")
View(cdc)
head(cdc\$height)

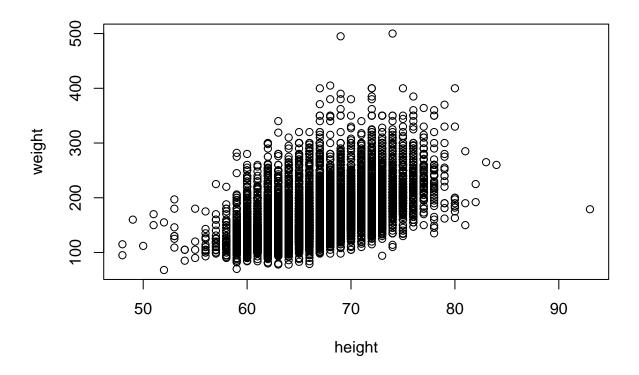
[1] 70 64 60 66 61 64

tail(cdc\$height)

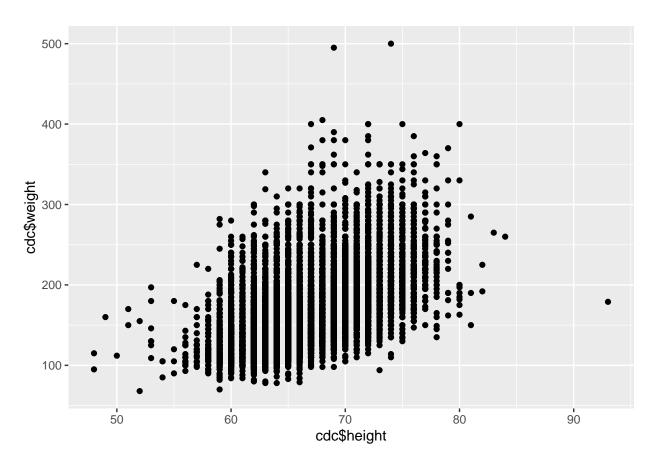
[1] 69 66 73 65 67 69

plot(cdc\$height, cdc\$weight)

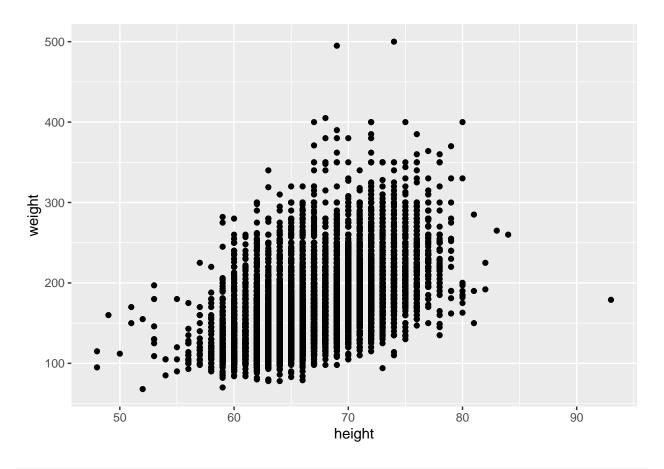




```
library(ggplot2)
ggplot(cdc, aes(x=cdc$height, y=cdc$weight))+
  geom_point()
```



ggplot(cdc)+
aes(height, weight)+
geom_point()



cor(cdc\$height, cdc\$weight)

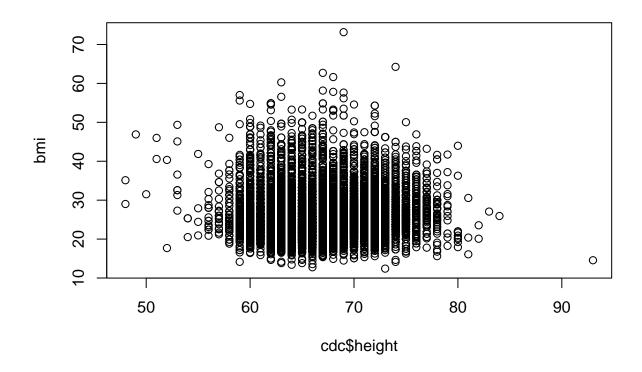
[1] 0.5553222

```
height_m <- cdc$height * 0.0254

weight_kg <- cdc$weight * 0.454

bmi <- weight_kg/(height_m^2)
```

plot(cdc\$height, bmi)



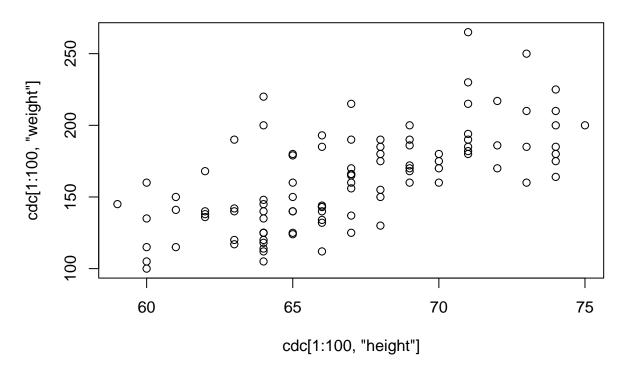
```
cor(cdc$height,bmi)

## [1] 0.03251694

sum(bmi >= 30)

## [1] 3897

plot(cdc[1:100, "height"], cdc[1:100, "weight"])
```



```
cdc$bmi <- weight_kg/(height_m^2)
table(cdc$gender[cdc$bmi>=30])

##
## m f
## 1961 1936

table(cdc$gender, cdc$bmi>30)

##
## FALSE TRUE
## m 7608 1961
## f 8495 1936
```