# Assignment 2

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## Importing the data

Check out my GitHub for the full code *here*.

```
# I've used R and Python for quantum computing before so I'm gonna use things we didn't learn in class
a2 <-  read.csv("assign.csv")
library(ggplot2)
library(rmarkdown)
```

## Question 1

### Part a

The *explanatory variables* based on the research question are the **sex** and **screen**. We observe both of these variables to see how they affect the *response variable* of **physical**.

### Part b

The variables in the dataset I will use to answer the research question are **sex**, **screen**, and **tilt**.

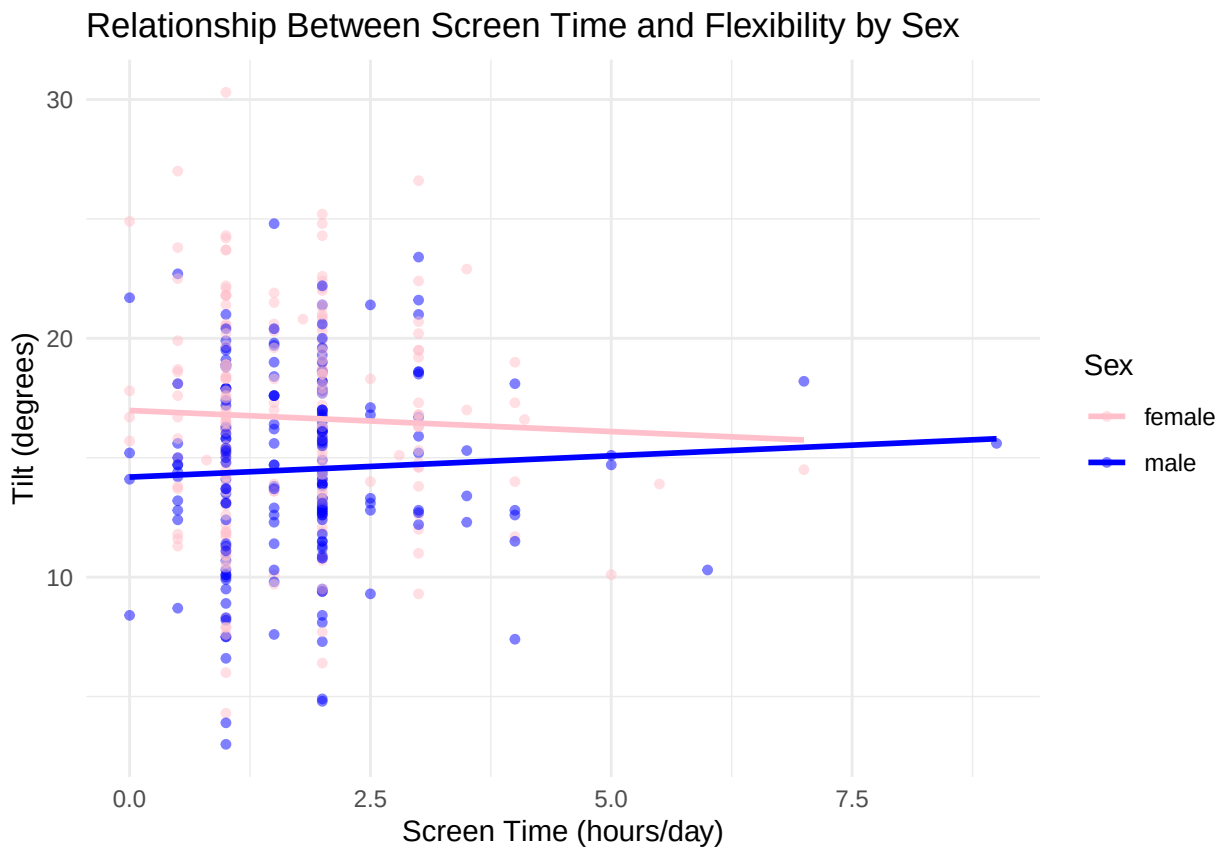
### Part c

The *categorical variable* is **sex**. The *qualitative variables* are **screen** and **tilt**.

## Question 2

```
ggplot(a2, aes(x=screen, y=tilt, color=sex)) + # making x and y axis
    geom_point(size=2, shape=20, alpha=0.5) + # making the points
    geom_smooth(method="lm", se=FALSE, aes(group=sex)) + # add linear trend lines without the confidenc
    labs(title="Relationship Between Screen Time and Flexibility by Sex", x="Screen Time (hours/day)", y
    theme_minimal() + # making it look nicer
    scale_color_manual(values=c("pink","blue")) # blue for male and pink for female
```

```
## `geom_smooth()` using
## formula = 'y ~ x'
```


Relationship Between Screen Time and Flexibility by Sex
Tilt (degrees)
30
20
10
0.0
2.5
5.0
7.5
Screen Time (hours/day)
Sex
female
male