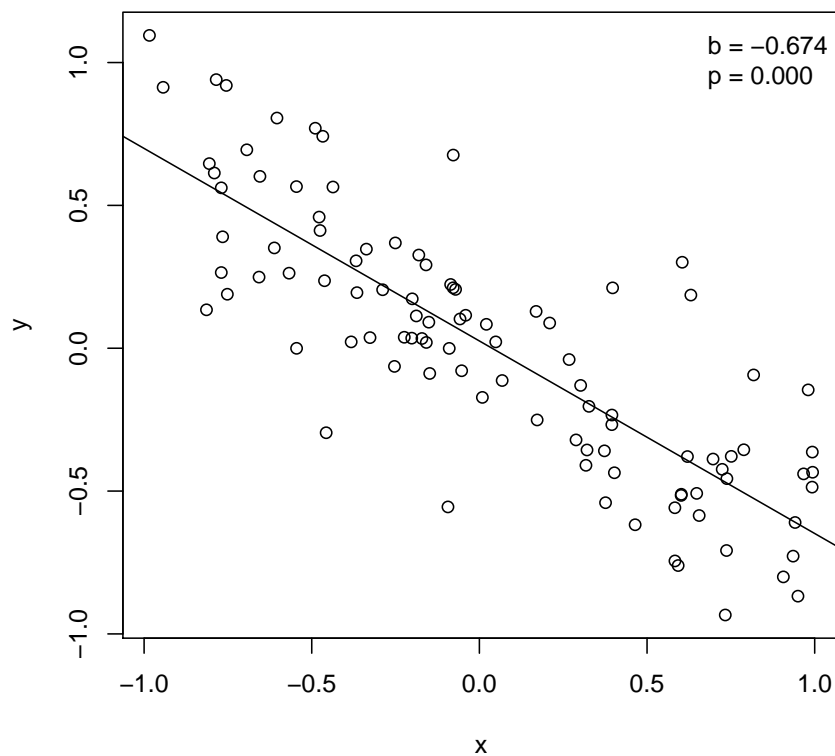


### 1. Problem

Using the data provided in `regression.csv` estimate a linear regression of  $y$  on  $x$  and answer the following questions.

- (a)  $x$  and  $y$  are not significantly correlated /  $y$  increases significantly with  $x$  /  $y$  decreases significantly with  $x$
- (b) Estimated slope with respect to  $x$ :

### Solution



To replicate the analysis in R:

```
R> ## data
R> d <- read.csv("regression.csv")
R> ## regression
R> m <- lm(y ~ x, data = d)
R> summary(m)
R> ## visualization
R> plot(y ~ x, data = d)
R> abline(m)
```