Flipped Assignment 6

Group 5

2022/2/15

Input data

```
setwd('G:/OneDrive - Texas Tech University/IE 5344 Statistical Data Analysis/Flipped Assignment 6')
data<-read.csv('data-table-B8.csv', header = TRUE)
colnames(data) <- c("x1","x2","y")
```

Part a.

```
fit <- lm(y~x1+x2,data)
summary(fit)
```

```
##
## Call:
## lm(formula = y ~ x1 + x2, data = data)
##
## Residuals:
##     Min      1Q  Median      3Q     Max
## -9.7716 -4.1656  0.0802  3.8323  8.3349
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) 1.109e+01  1.669e+00   6.642 1.48e-07 ***
## x1          3.501e+02  3.968e+01   8.823 3.38e-10 ***
## x2          1.089e-01  9.983e-03  10.912 1.74e-12 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 4.782 on 33 degrees of freedom
## Multiple R-squared:  0.8415, Adjusted R-squared:  0.8319
## F-statistic:  87.6 on 2 and 33 DF,  p-value: 6.316e-14
```

Part b.

```
fit$coefficients
```

```
## (Intercept)          x1          x2
##  11.0869804 350.1192457   0.1089344
```

So, $\hat{y} = 11.087 + 350.119x_1 + 0.109x_2$.