Practice1

1. x is a vector with length 30 and $x \sim Unif(-10, 10)$. Generate it.(Use `set.seed(20120518)`)

2. $y = \beta_0 + \beta_1 x + \epsilon$ where $\epsilon \sim N(0, 1)$, $\beta_0 = 1$ and $\beta_1 = 2$. Generate y.(Use `set.seed(20120518)`)

3. Use the x and y generated above, calculate $\hat{\beta}_0$ and $\hat{\beta}_1$ according to the Simple linear regression.

4. Calculate the 95% confidence intervals for both $\hat{\beta}_0$ and $\hat{\beta}_1$.

5. Compare the results with that of the `lm` function in R.