## Assignment File 2

21) When implementing linear regression of some dependent variable y on the set of independent

variables  $\mathbf{x} = (x_1, ..., x_r)$ , where r is the number of predictors, which of the following statements will

be true?

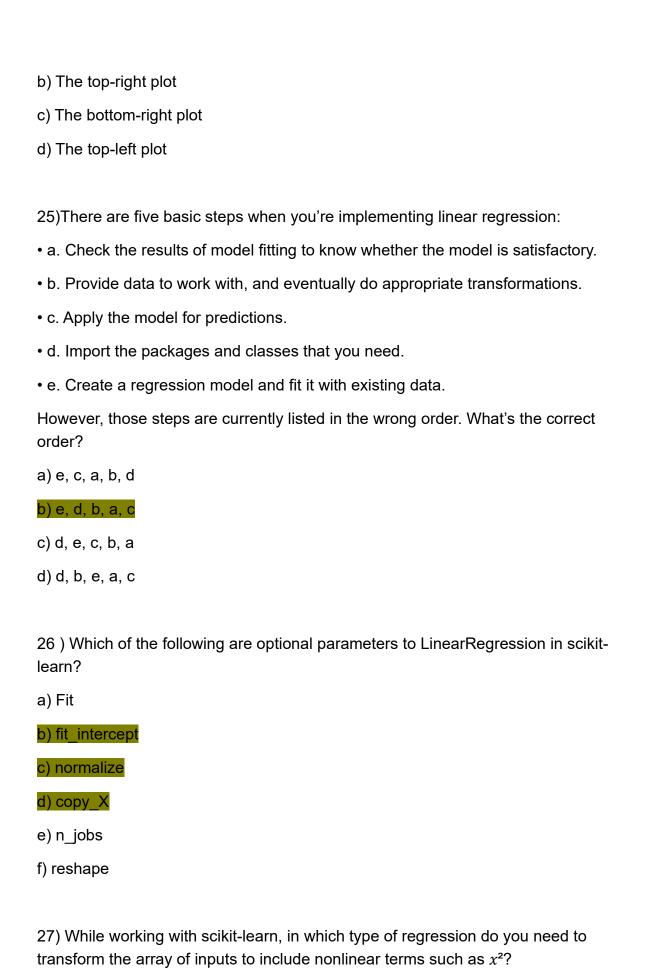
- a)  $\beta_0$ ,  $\beta_1$ , ...,  $\beta_r$  are the regression coefficients.
- b) Linear regression is about determining the best predicted weights by using the method of ordinary least squares.
- c) E is the random interval

## d) Both and b

- 22 ) What indicates that you have a perfect fit in linear regression?
- a) The value  $R^2 < 1$ , which corresponds to SSR = 0
- b) The value  $R^2 = 0$ , which corresponds to SSR = 1
- c) The value  $R^2 > 0$ , which corresponds to SSR = 1
- d) The value  $R^2 = 1$ , which corresponds to SSR = 0
- 23) In simple linear regression, the value of what shows the point where the estimated regression line crosses the y axis?
- a) Y
- b) B0
- c) B1
- d) F
- 24) Check out these four linear regression plots:

Which one represents an underfitted model?

a)The bottom-left plot



a)Multiple linear regression

b) Simple linear regression