21 When implementing linear regression of some dependent variable y on the set of independent variables $\mathbf{x} = (x_1, \ldots, x_r)$, where r is the number of predictors, which of the following statements will be true?
Answer-$\beta_0, \beta_1, \ldots, \beta_r$ are the regression coefficients.

Question 22 - What indicates that you have a perfect fit in linear regression?
Answer- The value $R^2 = 1$, which corresponds to SSR = 0

Question 23-In simple linear regression, the value of what shows the point where the estimated regression line crosses the y axis?
Answer-Y

Question 24-Check out these four linear regression plots:
Answer-The top-left plot

Question 25-There are five basic steps when you're implementing linear regression:
Answer-d, e, c, b, a

Question 26-Which of the following are optional parameters to LinearRegression in scikit-learn?
Answer-fit_intercept

Question 27-While working with scikit-learn, in which type of regression do you need to transform the array of inputs to include nonlinear terms such as x^2?
Answer-Simple linear regression.

Question 28-You should choose statsmodels over scikit-learn when:
Answer-You want graphical representations of your data.

Question 29-is a fundamental package for scientific computing with Python. It offers comprehensive mathematical functions, random number generators, linear algebra routines, Fourier transforms, and more. It provides a high-level syntax that makes it accessible and productive.
Answer- Numpy.

Question 30-is a Python data visualization library based on Matplotlib. It provides a high-level interface for drawing attractive and informative statistical graphics that allow you to explore and understand your data. It integrates closely with pandas data structures?
Answer- Seaborn