

## Answers for Assignment 2

21. D= Both A and B

- $\beta_0, \beta_1, \dots, \beta_r$  are the regression coefficients.
- Linear regression is about determining the best predicted weights by using the method of ordinary least squares.

22. d= The value  $R^2 = 1$ , which corresponds to  $SSR = 0$

when  $R^2 = 1$ , it means that the model explains all the variability in the dependent variable, and  $SSR = 0$ , indicating a perfect fit in linear regression.

23. b= B0

B0 is the intercept or the value where the regression line crosses the y-axis

24. d= The top-left plot.

25. d= d, b, e, a, c

- d. Import the packages and classes that you need.
- b. Provide data to work with, and eventually do appropriate transformations.
- e. Create a regression model and fit it with existing data.
- a. Check the results of model fitting to know whether the model is satisfactory.
- c. Apply the model for predictions.

26. b= fit\_intercept

C= normalize

D= copy\_X

E= n\_jobs

27. Polynomial regression

28. c= you need more detailed results

29. b=Numpy

30. b=seaborn