

Question 1a:

Annual Revenue data for a company is given as follows:

Table 1

Year	2014	2015	2016	2017
Rev	61.2	58.3	67.1	69.2

Apply the PCA on the table given above to calculate the Principal Components for rev.

Question 1b:

Write a code to apply the PCA (Principal Component Analysis) algorithm on the “Table 1” dataset and visualize the reduced-dimensional data using Python with sci-kit-learn and Matplotlib. Hint: Use pandas to store Table as a data frame and then apply the PCA

Question 2a:

Write the steps to calculate the slope and intercept of a least square line fitting the data.

Question 2b:

Write a code using the Python sci-kit-learn library 'for the year and Principal Component for rev obtained by question 1' available in sci-kit-learn to implement simple linear regression.

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