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Subject: Design and Analysis of Algorithm

Exp 4 : To implement dynamic

algorithms - II (Finding LCS)

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### Report:-

#### → Functions used and classes used:-

- A class named "element" is made consisting of following data members: (1) int data (2) char dir used to denote the data and direction respectively.
- A function named "printLCS\_matrix()" is used which takes 2 strings and a matrix as parameters. This function populates the matrix with the data and directions.
- A function named "printLCS()" is used which takes 2 strings and the populated matrix as parameters. This matrix is then scanned from the bottom-right and the LCS is computed and printed.

#### → Conclusion :-

- 2 strings are taken as input from the user which is then used to print the matrix which is populated with the data and direction.
- This matrix is then used to print the final LCS.