Step-1

Consider the statement, â€œIf the eigenvectors of A are the columns of I then A is a ___ matrix. If the eigenvector matrix S is triangular then S^{-1} is triangular and the matrix A is triangular.â€

The objective is to fill in the blanks of this statement.

Step-2

If the eigenvector matrix S is triangular then S^{-1} is triangular and the matrix A is triangular.

The statement said that the eigenvectors of A are the columns of I.

The identity matrix is a triangular matrix so its inverse will be triangular also.

Therefore, the matrix A will also be a triangular matrix.

Hence the blank is filled by triangular.