Created a new matrix A $A_{2,2} = \begin{pmatrix} 1.000000 & 0.000000 \\ 0.000000 & 1.000000 \end{pmatrix}$

$A_{2,2} = \begin{pmatrix} 0.000000 & 1.000000 \\ 2.000000 & 3.000000 \end{pmatrix}$

=A$and1is$ Ñomposition$_{2,2} = \begin{pmatrix} 0.000000 & 1.000000 \\ 2.000000 & 3.000000 \end{pmatrix}$

Created a new matrix B $B_{2,2} = \begin{pmatrix} 1.000000 & 0.000000 \\ 0.000000 & 1.000000 \end{pmatrix}$

$B_{2,2} = \begin{pmatrix} 0.000000 & 1.000000 \\ 2.000000 & 3.000000 \end{pmatrix}$

Ñomposition of A and $B$is $\tilde{N}omposition_{2,2} = \begin{pmatrix} 2.000000 & 3.000000 \\ 6.000000 & 11.000000 \end{pmatrix}$

Dimension of matrix A is 2

Trace of matrix A is 13

Determinant of matrix $A =$ $_{2,2} = \begin{pmatrix} 2.000000 & 3.000000 \\ 6.000000 & 11.000000 \end{pmatrix}$

is

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Transponet of matrix A is matrix $T_{2,2} = \begin{pmatrix} 2.000000 & 6.000000 \\ 3.000000 & 11.000000 \end{pmatrix}$

Exponent of matrix A=$_{2,2} = \begin{pmatrix} 2.000000 & 6.000000 \\ 3.000000 & 11.000000 \end{pmatrix}$ is matrix $Exp_{2,2} = \begin{pmatrix} 91287910.000000 & 325126704.000000 \\ 162563352.000000 & 578977966.000000 \end{pmatrix}$

Reverse matrix of matrix A is matrix $Reverse_{2,2} = \begin{pmatrix} 0.356242 & -0.200049 \\ -0.100024 & 0.056169 \end{pmatrix}$

Check$_{2,2} = \begin{pmatrix} 1.000000 & -0.000000 \\ 0.000000 & 1.000000 \end{pmatrix}$