

Pseudocode

PES1PG20CA046

i) Inverse of a  $2 \times 2$  matrix

- Get input of  $2 \times 2$  matrix elements in array  $a[i][j]$
- Display matrix before inverse function
- Call inverse function
- In function inverse()
- Store  $a[0][0]$  in temp
- Store value of  $a[i][j]$  in  $a[0][0]$
- Store temp value in  $a[i][j]$
- Display resultant matrix

ii) Determinant of  $2 \times 2$  matrix

- Get input of  $2 \times 2$  matrix in array  $a[i][j]$
- Scanf elements of matrix
- Call determinant function
- In function Determinant()
- $\text{Determinant} = (a[0][0] * a[1][1]) - (a[0][1] * a[1][0]);$
- Display determinant

## iii) Saddle point of matrix

- Get size of matrix (n)
- Get elements of  $n \times n$  matrix
- In a for loop
- Get min value of row
- Get max value of column where min is found
- Check if  $\text{min} == \text{max}$
- if yes, store the value
- Display the Saddle point