

10 for addtion & subtraction of matrices.

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Algorithm

Step 1. Start

Step 2. input row, col

Step 3. print the elements of matrix A

Step 4. for ($i=0$; $i < \text{row}$; $i++$)

4.1 for ($j=0$; $j < \text{col}$; $j++$)

4.2 print the element

4.3 read $a[i][j]$

4.4 repeat 4.1, 4.2 until condiⁿ becomes false

Step 4.5 print (" $\backslash n$ ")

Step 4.6 repeat 4 until condition becomes false

Step 5. print the elements of matrix B

S.1 for ($i=0$; $i < \text{row}$; $i++$)

S.2 for ($j=0$; $j < \text{col}$; $j++$)

S.3 print the element

S.4 read $b[i][j]$

S.5 repeat S.2, S.3, S.4 until condition becomes false

S.6 print (" $\backslash n$ ")

S.7 repeat S until condition becomes false

Step 6. print the addiⁿ of A & B is

6.1 for ($i=0$; $i < \text{row}$; $i++$)

6.2 for ($j=0$; $j < \text{col}$; $j++$)

6.3 $c[i][j] = a[i][j] + b[i][j]$

6.4 repeat 6.1, 6.2, 6.3 until condition becomes false.

Step 7: for ($i=0$; $i < \text{row}$; $i++$)

7.1 for ($j=0$; $j < \text{col}$; $j++$)

7.2 print $c[i][j]$

7.3 repeat 7.1, 7.2 until condiⁿ becomes false

7.4 print (" $\backslash n$ ")

7.5 repeat 7 until condiⁿ becomes false

Step 8 print the subtraction of $A \times B$ is

8.1 for ($i=0$; $i < \text{row}$; $i++$)

8.2 for ($j=0$; $j < \text{col}$; $j++$)

8.3 $d[i][j] = a[i][j] - b[i][j]$

8.4 repeat 8.1, 8.2, 8.3 until condition becomes false

Step 9. for ($i=0$; $i < \text{row}$; $i++$)

9.1 for ($j=0$; $j < \text{col}$; $j++$)

9.2 print $d[i][j]$

9.3 repeat 9.1, 9.2 until condiⁿ be. false

9.4 print (" $\backslash n$ ")

9.5 repeat Step 9 until test condition becomes false

Step 10: return 0

Step 11: stop.

Flowchart

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