C program to implement Matrix addition & substraction

Algorithm :

1. Start

2. Input r & c

3. Repeat through step 3.
   for (i=0; i<r; i++)
   for (j=0; j<c; j++)
       Input a[i][j]

4. Repeat through step 4
   for (i=0; i<r; i++)
   for (j=0; j<c; j++)
       Input b[i][j]

5. Repeat through step 5
   for (i=0; i<r; i++)
   5.1 for (j=0; j<c; j++)
       5.1 a) M[i][j] = a[i][j] + b[i][j]
       5.1 b) Print m[i][j]
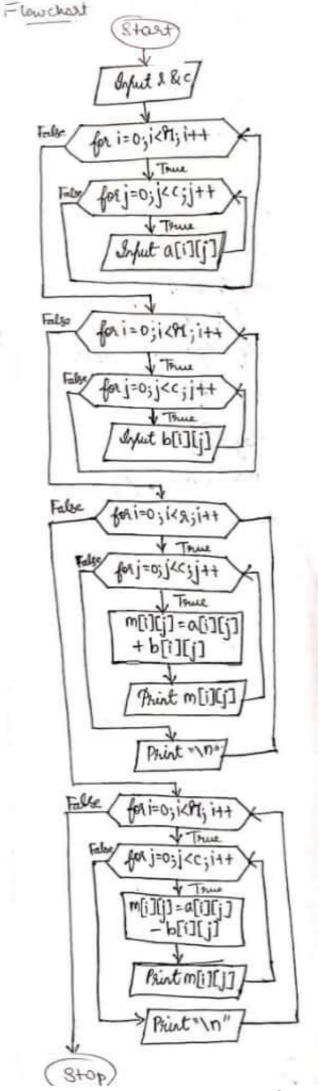   5.2 Print "\n"

6. Repeat through step 6
   for (i=0; i<r; i++)
   6.1 for (j=0; j<c; j++)
       6.1 a) m[i][j] = a[i][j] - b[i][j]
       6.1 b) Print m[i][j]
   6.2 Print "\n"

7. Stop.

Flowchart

Start

Input r & c

False ← for i=0; i<r; i++
True ↓

False ← for j=0; j<c; j++
True ↓

Input a[i][j]

False ← for i=0; i<r; i++
True ↓

False ← for j=0; j<c; j++
True ↓

Input b[i][j]

False ← for i=0; i<r; i++
True ↓

False ← for j=0; j<c; j++
True ↓

m[i][j] = a[i][j] + b[i][j]

Print m[i][j]

Print "\n"

False ← for i=0; i<r; i++
True ↓

False ← for j=0; j<c; j++
True ↓

m[i][j] = a[i][j] - b[i][j]

Print m[i][j]

Print "\n"

Stop