C Program to find addition and substraction of matrices.

Algorithm:

Step 1: Start

Step 2: Input row, col

Step 3: Print the elements of matrix A.

Step 4: for(i=0; i<row; i++)

4.1 : for(j=0; j<col; j++)

4.2 : print the element

4.3 : read a[i][j]

4.4 : repeat 4.1, 4.2 until condition becomes false

4.5 : print ("\n")

4.6 : repeat 4 until condition becomes false

Step 5 : print the element of matrix B

5.1 : for (i=0; i<row; i++)

5.2 : for (j=0; j<col; j++)

5.3 : print the element

5.4 : read b[i][j]

5.5 : repeat 5.2, 5.3, 5.4 until condition becomes false

5.6 : print ("\n")

5.7 : repeat 5.1 until condition becomes false

Step 6 : Print the addition of A and B is

6.1 : for(i=0; i<row; i++)

6.2 : for (j=0; j<col; j++)

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

6.4 : repeat Step 6.1, 6.2, 6.3 until condition becomes false

Step 7 : for (i=0; i<row; i++)

7.1 : for (j=0; j<col; j++)

7.2 : print c[i][j]

7.3 : repeat step 7.1, 7.2 until condition becomes false

7.4 : print ("\n\t\t")

7.5 : repeat step 7 until condition becomes false

Step 8 : print the substraction of A & B is

8.1 : for(i=0;i<row;i++)

8.2 ; for (j=0;j<col;, j++)

8.3 : d[i][i]:a[i][i]-b[i][j]

8.4 : repeat 8.1, 8.2 & 8.3 until condition becomes false

Step 9 : for(i=0 ; i<row; i++)

9.1 : for(j=0; j<col ; j++)

9.2 : print d[i][i]

9.3 ; repeat 9.1 and 9.2 until condition becomes false

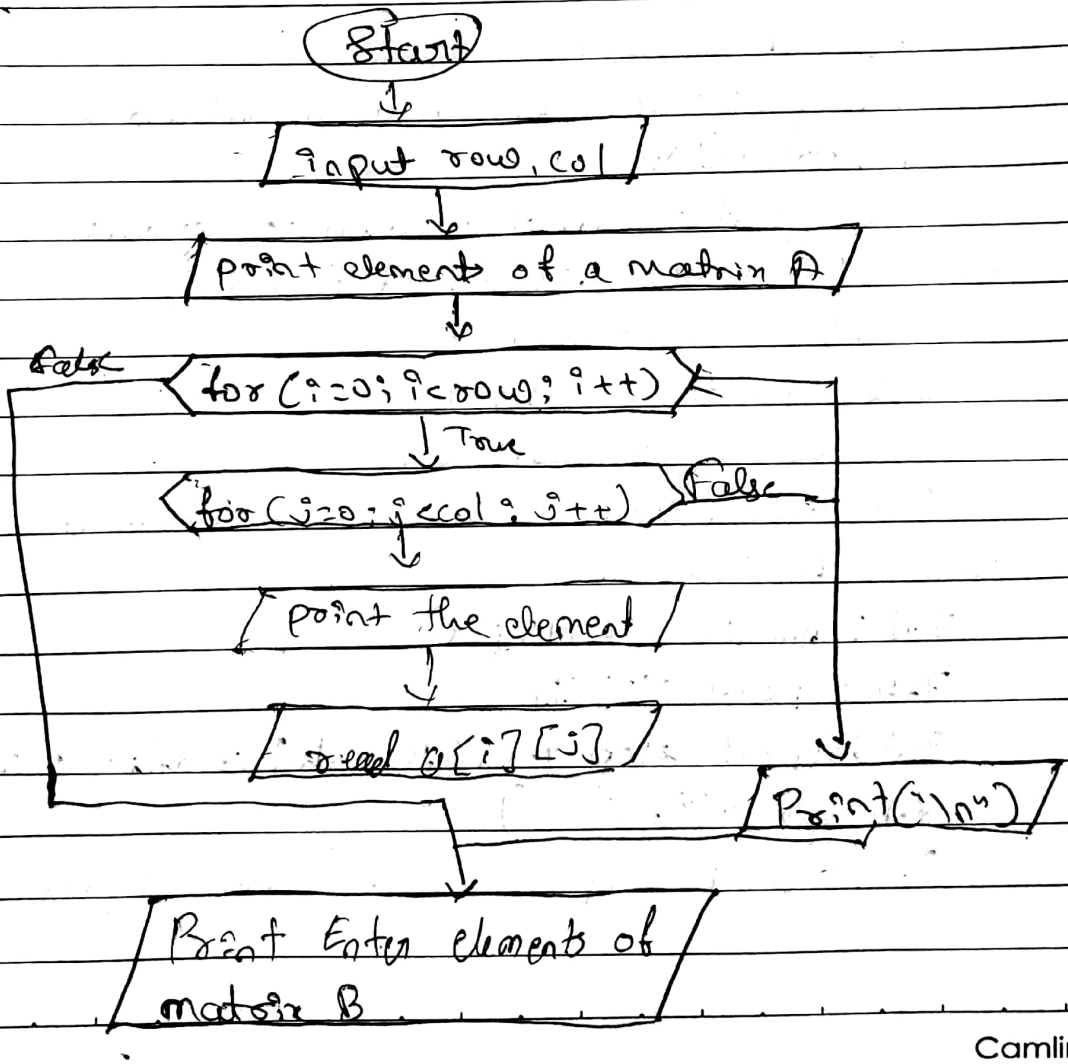
9.4 : printf("\n\t\t")

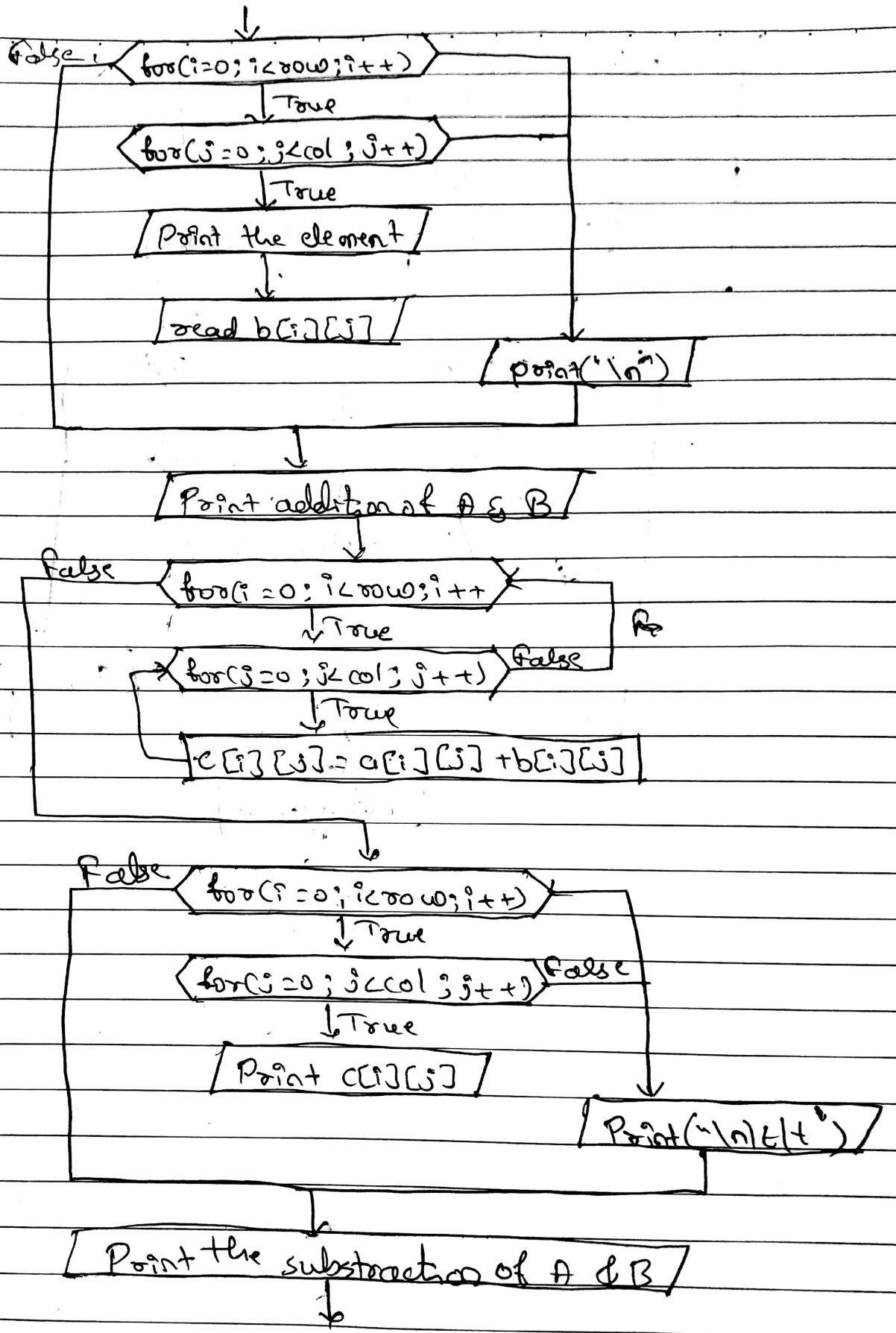
9.5 : repeat step 9 until test condition becomes false

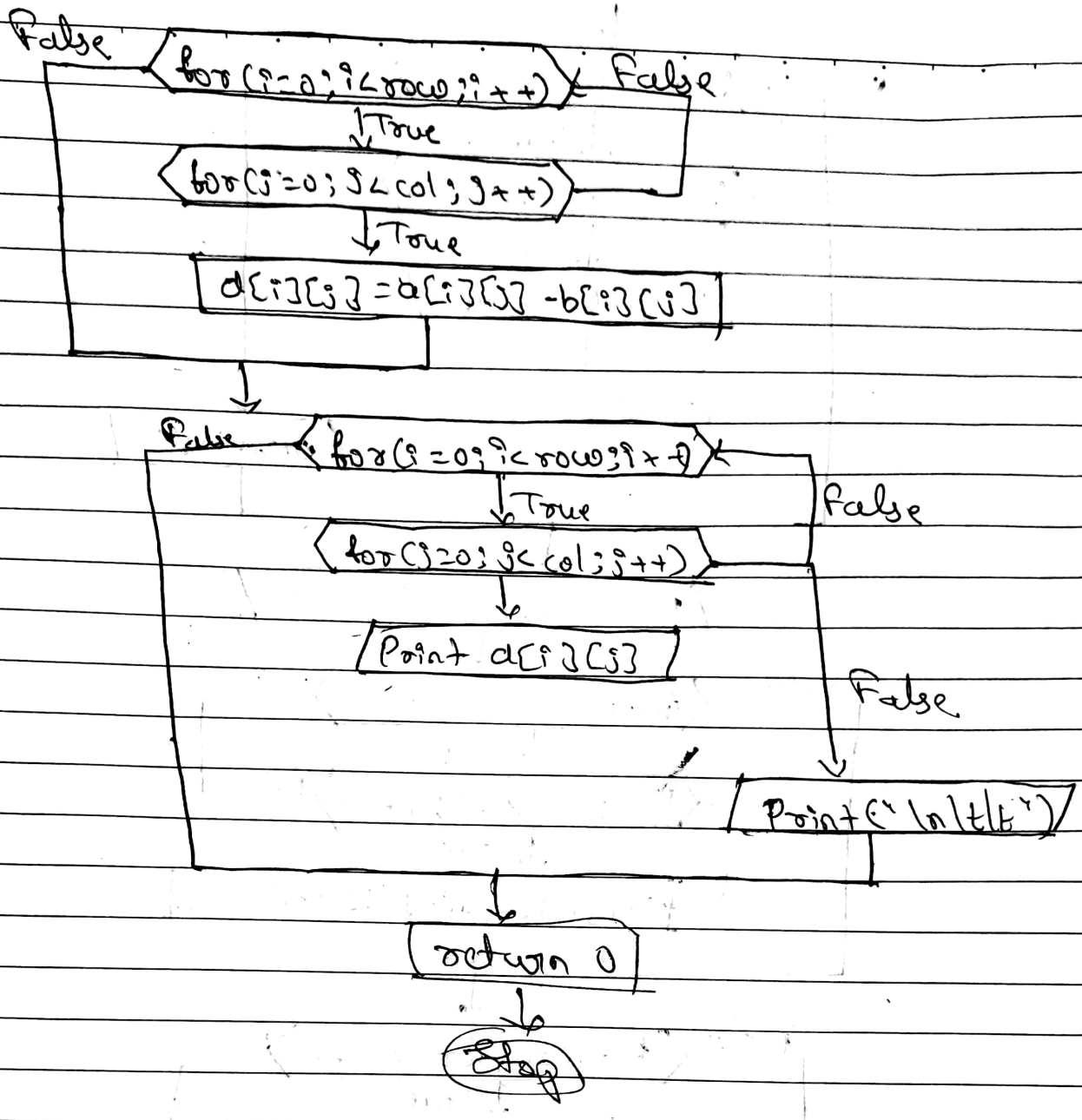
Step 10 : return 10

Step 11 : stop.

Flowchart :—




for(i=0; i<row; i++)
False
True
for(j=0; j<col; j++)
True
Print the element
read b[i][j]
print("\n")
Print addition of A & B
for(i=0; i<row; i++
False
True
for(j=0; j<col; j++)
False
True
c[i][j] = a[i][j] + b[i][j]
for(i=0; i<row; i++)
False
True
for(j=0; j<col; j++)
False
True
Print c[i][j]
Print("\n\t")
Print the substraction of A & B


for(i=0; i<row; i++)
False
True
for(j=0; j<col; j++)
False
True
d[i][j] = a[i][j] - b[i][j]
for(i=0; i<row; i++)
False
True
for(j=0; j<col; j++)
False
Print d[i][j]
False
Print("\n\t\t")
return 0
Stop