C program to implement matrix addition and subtraction

Algorithm:

Step 1: Start

Step 2: Declare int m, n, i, j,

Int first [10][10], second [10][10], Sum [10][10], dif [10][10].

Step 3: Read m & n values

Step 4: Read the 1st matrix elements using for loop

Step 5: Read the 2nd matrix elements using for loop

Step 6: Logic for sum & dif

```
for (i=0; i<m; i++)
    for (j=0; j<n; j++)
    {
        sum [i][j] = first [i][j] + second [i][j]
        dif [i][j] = first [i][j] - second [i][j]
    }
```

Step 7: Print result using for loop

Step 8: Stop

Flowchart:

```
                    ( Start )
                        |
                        v
          | Declare Int m, n, i, j |
                        |
                        v
   | Int first [n][n], Second [n][n], Sum[n][n], dif[n][n] |
                        |
                        v
            / Read the m,n values /
                        |
                        v
          / Read the first [i][j] value /
                        |
                        v  using for loop
          / Read the Second [i][j] value /
                        |
                        v  using for loop
          < for (i=0; i<m; i++) >
                        |
                        v  True
          < for (j=0; j<n; j++) >
                        |
                        v  True
      | Sum [i][j] = first [i][j] + Second[i][j] |
                        |
                        v
      | dif [i][j] = first[i][j] - Second[i][j] |
                        |
        False           v  True
            / print Sum[i][j] /
                        |
                        v
            / Print dif [i][j] /
                        |
                        v
                    ( Stop )
```