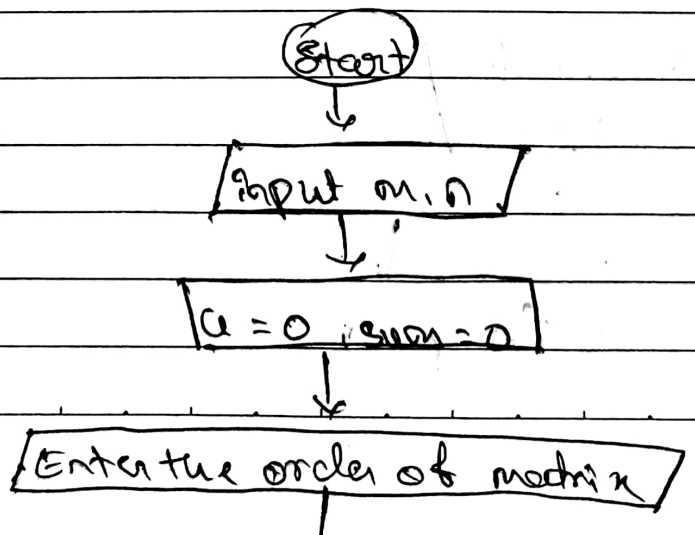
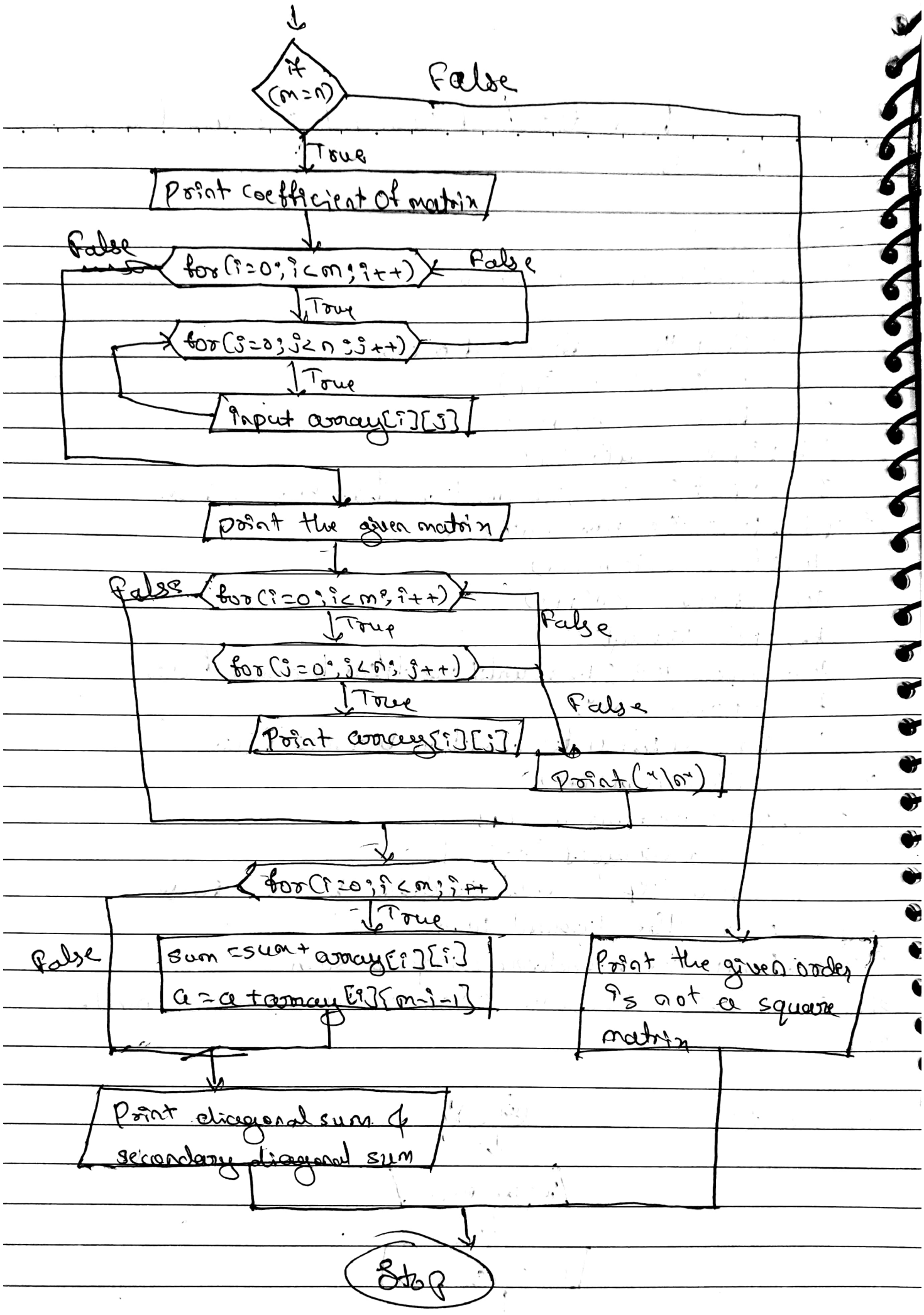
C Program to find diagonal sum and secondary diagonal sum.

Algorithm:-

Step 1: Start
Step 2: Input m, n, a=0, sum=0
Step 3: if (m=n)
  3.1: Print the coefficient of matrix
  3.2: for (i=0; i<m; i++)
  3.3: for (j=0; j<n; j++)
  3.4: Input array[i][i]
  3.5: repeat 3.2, 3.3, 3.4 until condition becomes false
Step 4: Print the given matrix is
  4.1: for (i=0; i<m; i++)
  4.2: for (j=0; j<n; j++)
  4.3: print array[i][j]
  4.4: repeat 4.2 & 4.3 until condition becomes false
  4.5: print ("\n")
  4.6: repeat 4.1 until condition becomes false
Step 5: for (i=0; i<m; i++)
  5.1: sum = sum + array[i][i]
  5.2: a = a + array[i][n-i-1]
  5.3: repeat step 5 until condition becomes false
Step 6: print the diagonal sum
Step 7: Print the secondary diagonal sum
Step 8: else print the given order is not a square matrix
Step 9: Stop

Flowchart:-




if (m=n)
False
True
Print coefficient of matrix
False
for(i=0; i<m; i++)
False
True
for(j=0; j<n; j++)
True
Input array[i][j]
Print the given matrix
False
for(i=0; i<m; i++)
False
True
for(j=0; j<n; j++)
True
Print array[i][j]
False
Print("\n")
for(i=0; i<m; i++
True
False
sum = sum + array[i][i]
a = a + array[i][n-i-1]
Print the given order is not a square matrix
Print diagonal sum & secondary diagonal sum
Stop