3.Write a C Program to rotate the matrix by K times.

#include<stdio.h>

int main() {

int matrix[100][100],M,N,k;

printf("Enter size of matrix\n");

scanf("%d%d",&M,&N);

printf("Enter the matrix elements\n");

for( int i = 0 ; i < M ; i++)

{

for(int j = 0 ; j < N ; j++)

{

scanf("%d",&matrix[i][j]); // Input the matrix elements

}

}

printf("Enter k value\n");

scanf("%d",&k);

int temp[M];

k = k % M;

for (int i = 0; i < N; i++) {

for (int t = 0; t < M - k; t++)

temp[t] = matrix[i][t];

for (int j = M - k; j < M; j++)

matrix[i][j - M + k] = matrix[i][j];

for (int j = k; j < M; j++)

matrix[i][j] = temp[j - k];

printf("The rotated matrix is\n");

for (int i=0; i < N; i++)

{

for (int j = 0; j < M; j++)

{

printf("%d ",matrix[i][j]);

}

printf("\n");

}

}

return 0;

}

