**● Write a program to make multiplication of 2-D Matrix**

#include <stdio.h>

#define ROW1 2 // Number of rows in first matrix

#define COL1 2 // Number of columns in first matrix

#define ROW2 2 // Number of rows in second matrix

#define COL2 2 // Number of columns in second matrix

void matrix\_multiply(int mat1[][COL1], int mat2[][COL2], int result[][COL2])

{

int i, j, k;

for(i = 0; i < ROW1; i++)

{

for(j = 0; j < COL2; j++)

{

result[i][j] = 0;

}

}

for(i = 0; i < ROW1; i++)

{

for(j = 0; j < COL2; j++)

{

for(k = 0; k < COL1; k++)

{

result[i][j] += mat1[i][k] \* mat2[k][j];

}

}

}

}

void display\_matrix(int matrix[][COL2], int rows, int cols)

{

int i, j;

for(i = 0; i < rows; i++)

{

for(j = 0; j < cols; j++)

{

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

}

printf("\n");

}

}

int main()

{

int matrix1[ROW2][COL2] = { {2,3},

{7,4}};

int matrix2[ROW2][COL2] = { {6,8},

{4,5}};

int result\_matrix[ROW1][COL2];

matrix\_multiply(matrix1, matrix2, result\_matrix);

printf("-----------Matrix 1:------------\n");

display\_matrix(matrix1, ROW1, COL1);

printf("\n-----------Matrix 2:-----------\n");

display\_matrix(matrix2, ROW2, COL2);

printf("\nResult of Matrix Multiplication:\n");

display\_matrix(result\_matrix, ROW1, COL2);

}

**Output:**

**-----------Matrix 1:------------**

**2 3**

**7 4**

**-----------Matrix 2:-----------**

**6 8**

**4 5**

**Result of Matrix Multiplication:**

**24 31**

**58 76**