**46. Multiply 2 matrices**

**PROGRAM:**

#include <bits/stdc++.h>

using namespace std;

#define R1 2

#define C1 2

#define R2 2

#define C2 3

void mulMat(int mat1[][C1], int mat2[][C2])

{

int rslt[R1][C2];

cout << "Multiplication of given two matrices is:\n";

for (int i = 0; i < R1; i++) {

for (int j = 0; j < C2; j++) {

rslt[i][j] = 0;

for (int k = 0; k < R2; k++) {

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

}

cout << rslt[i][j] << "\t";

}

cout << endl;

}

}

int main()

{

int mat1[R1][C1] = { { 1, 1 }, { 2, 2 } };

int mat2[R2][C2] = { { 1, 1, 1 }, { 2, 2, 2 } };

if (C1 != R2) {

cout << "The number of columns in Matrix-1 must "

"be equal to the number of rows in "

"Matrix-2"

<< endl;

cout << "Please update MACROs according to your "

"array dimension in #define section"

<< endl;

exit(EXIT\_FAILURE);

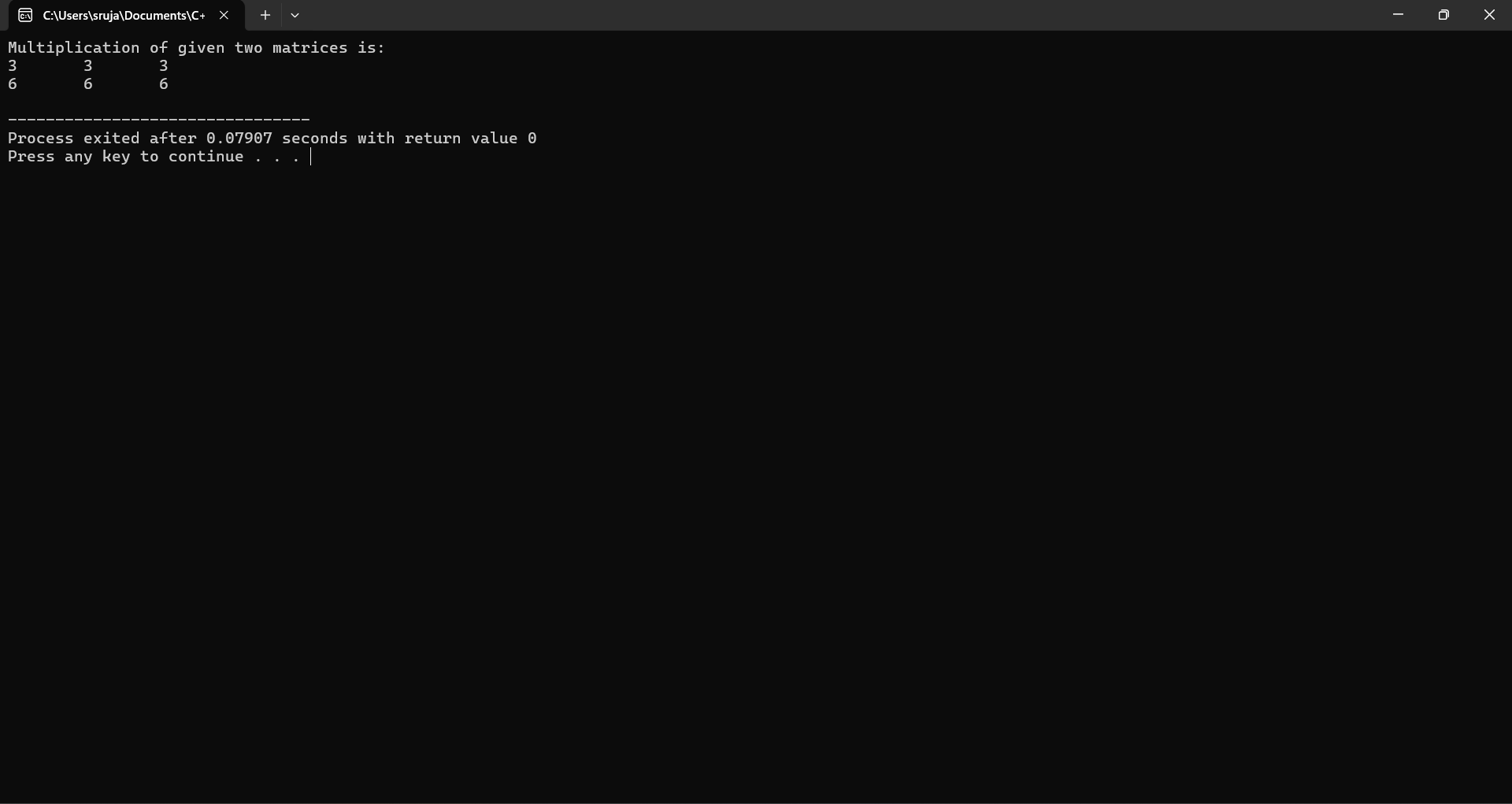
}

mulMat(mat1, mat2);

return 0;

}

**OUTPUT:**

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