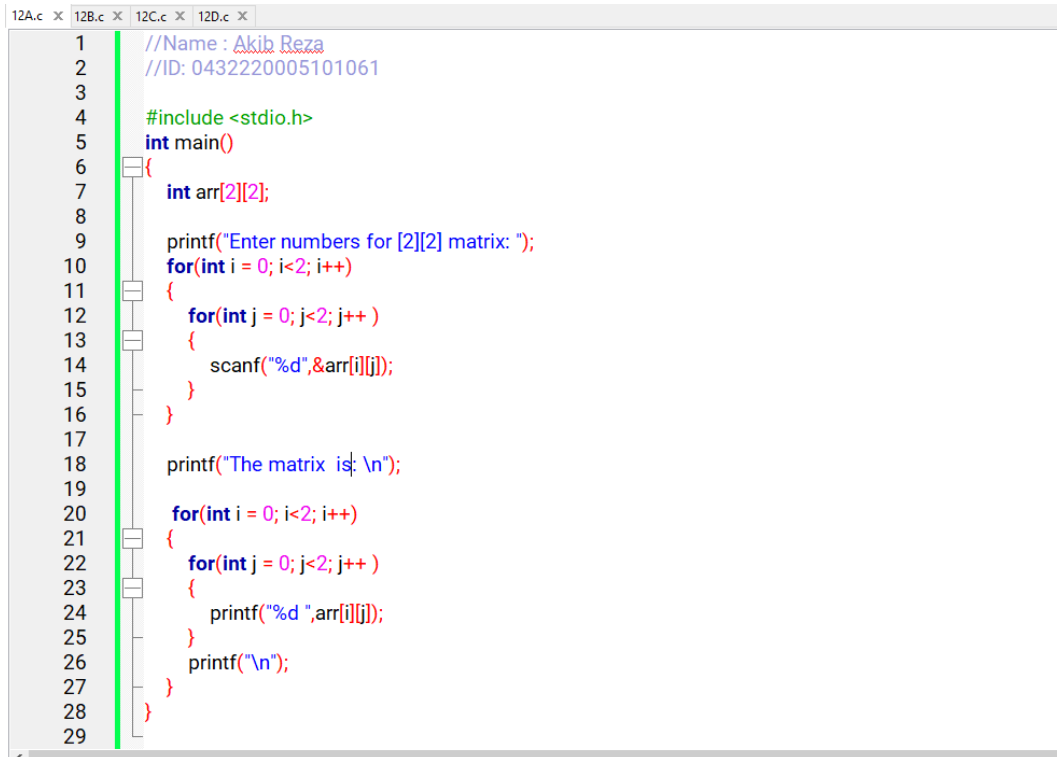


**Name: Akib Reza**

**ID: 0432220005101061**

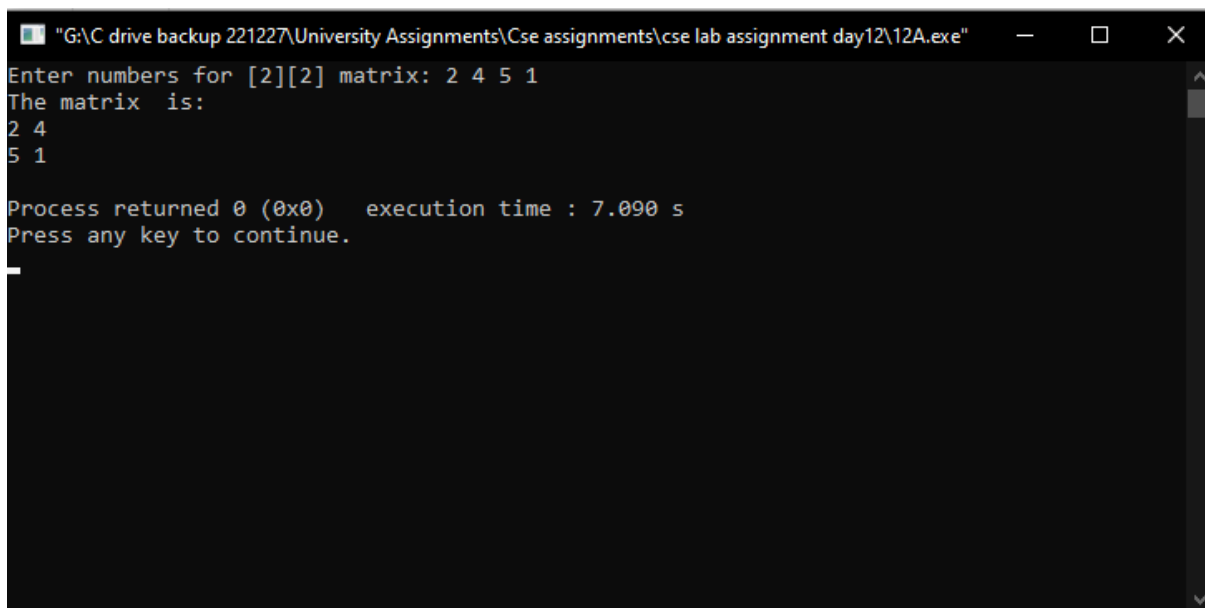
## 12A:

## Input:



```
1 //Name : Akib Reza
2 //ID: 0432220005101061
3
4 #include <stdio.h>
5 int main()
6 {
7     int arr[2][2];
8
9     printf("Enter numbers for [2][2] matrix: ");
10    for(int i = 0; i<2; i++)
11    {
12        for(int j = 0; j<2; j++)
13        {
14            scanf("%d",&arr[i][j]);
15        }
16    }
17
18    printf("The matrix is: \n");
19
20    for(int i = 0; i<2; i++)
21    {
22        for(int j = 0; j<2; j++)
23        {
24            printf("%d ",arr[i][j]);
25        }
26        printf("\n");
27    }
28 }
29
```

## Output:



```
"G:\C drive backup 221227\University Assignments\Cse assignments\cse lab assignment day12\12A.exe"
Enter numbers for [2][2] matrix: 2 4 5 1
The matrix is:
2 4
5 1

Process returned 0 (0x0)   execution time : 7.090 s
Press any key to continue.
```

## 12B:

### Input:

```
12A.c x 12B.c x 12C.c x 12D.c x
1 //Name : Akib Reza
2 //ID: 0432220005101061
3
4 #include <stdio.h>
5 int main()
6 {
7     int arr1[2][2];
8     int arr2[2][2];
9     printf("1st matrix: \n");
10    for(int i = 0; i<2; i++)
11    {
12        for(int j = 0; j<2; j++)
13        {
14            scanf("%d",&arr1[i][j]);
15        }
16    }
17    printf("2nd matrix: \n");
18    for(int i = 0; i<2; i++)
19    {
20        for(int j = 0; j<2; j++)
21        {
22            scanf("%d",&arr2[i][j]);
23        }
24    }
25    printf("Addition: \n");
26    for(int i = 0; i<2; i++)
27    {
28        for(int j = 0; j<2; j++)
29        {
30            printf("%d ",arr1[i][j]+arr2[i][j]);
31        }
32        printf("\n");
33    }
34 }
35
```

### Output:

```
"G:\C drive backup 221227\University Assignments\Cse assignments\cse lab assignment day12\12B.exe"
1st matrix:
4 2 1 9
2nd matrix:
2 2 4 6
Addition:
6 4
5 15

Process returned 0 (0x0)   execution time : 8.332 s
Press any key to continue.
```

## 12C:

## Input:

```
12A.c x 12B.c x *12C.c x 12D.c x
1 //Name : Akib Reza
2 //ID: 0432220005101061
3
4 #include <stdio.h>
5 int main()
6 {
7     int arr1[2][2];
8     int arr2[2][2];
9     printf("Matrix 1 : \n");
10    for(int i = 0; i<2; i++)
11    {
12        for(int j = 0; j<2; j++)
13        {scanf("%d",&arr1[i][j]);}
14    }
15    printf("Matrix 2: \n");
16    for(int i = 0; i<2; i++)
17    {
18        for(int j = 0; j<2; j++)
19        {scanf("%d",&arr2[i][j]);}
20    }
21    int x[2][2];
22    for(int i=0; i < 2; i++)
23    {
24        for(int j=0; j < 2; j++)
25        {
26            x[i][j] = 0;
27            for(int k=0; k < 2; k++){x[i][j] += arr1[i][k]*arr2[k][j];}
28        }
29    }
30    printf("After multiplying matrix 1 and matrix 2 : \n");
31    for(int i = 0; i<2; i++)
32    {
33        for(int j = 0; j<2; j++)
34        {printf("%d ",x[i][j]);}
35        printf("\n");
36    }
37 }
```

## Output:

```
"G:\C drive backup 221227\University Assignments\Cse assignments\cse lab assignment day12\12C.exe"
Matrix 1 :
5 1 5 2
Matrix 2:
7 8 3 2
After multiplying matrix 1 and matrix 2 :
38 42
41 44

Process returned 0 (0x0)   execution time : 4.460 s
Press any key to continue.
_
```

## 12D:

## Input:

```
12A.c x 12B.c x 12C.c x 12D.c x
1 //Name : Akib Reza
2 //ID: 0432220005101061
3
4 #include <stdio.h>
5 #include <string.h>
6 int main()
7 {
8     char name1[50];
9     char name2[50];
10
11
12
13     printf("Enter 1st string: ");
14     scanf("%s",name1);
15     printf("Enter 2nd string: ");
16     scanf("%s",name2);
17
18     //STRLEN
19     printf("Length of 1st string: %d\n", strlen(name1));
20     printf("Length of 2nd string: %d\n", strlen(name2));
21
22
23     //STRCMP
24     if (strcmp(name1, name2) == 0)
25     {
26         printf("The strings are same.\n");
27     }else
28     {
29         printf("The strings are different.\n");
30     }
31
32     //STRCAT
33     printf("After concatenation: %s",strcat(name1,name2));
34 }
35
```

## Output:

```
"G:\C drive backup 221227\University Assignments\Cse assignments\cse lab assignment day12\12D.exe"
Enter 1st string: lionel
Enter 2nd string: messi
Length of 1st string: 6
Length of 2nd string: 5
The strings are different.
After concatenation: lionelmessi
Process returned 0 (0x0)   execution time : 11.529 s
Press any key to continue.
```