

# **HAMMAD MURTAZA**

## **SID: 11146**

### **OS LAB 1**

**Q1:**

**CODE:**

```
#include<stdio.h>

int main()
{
    int first_num, second_num;
    int multiply;
    float divide;

    printf("Enter First number : ");
    scanf("%d", &first_num);

    printf("Enter Second number : ");
    scanf("%d", &second_num);

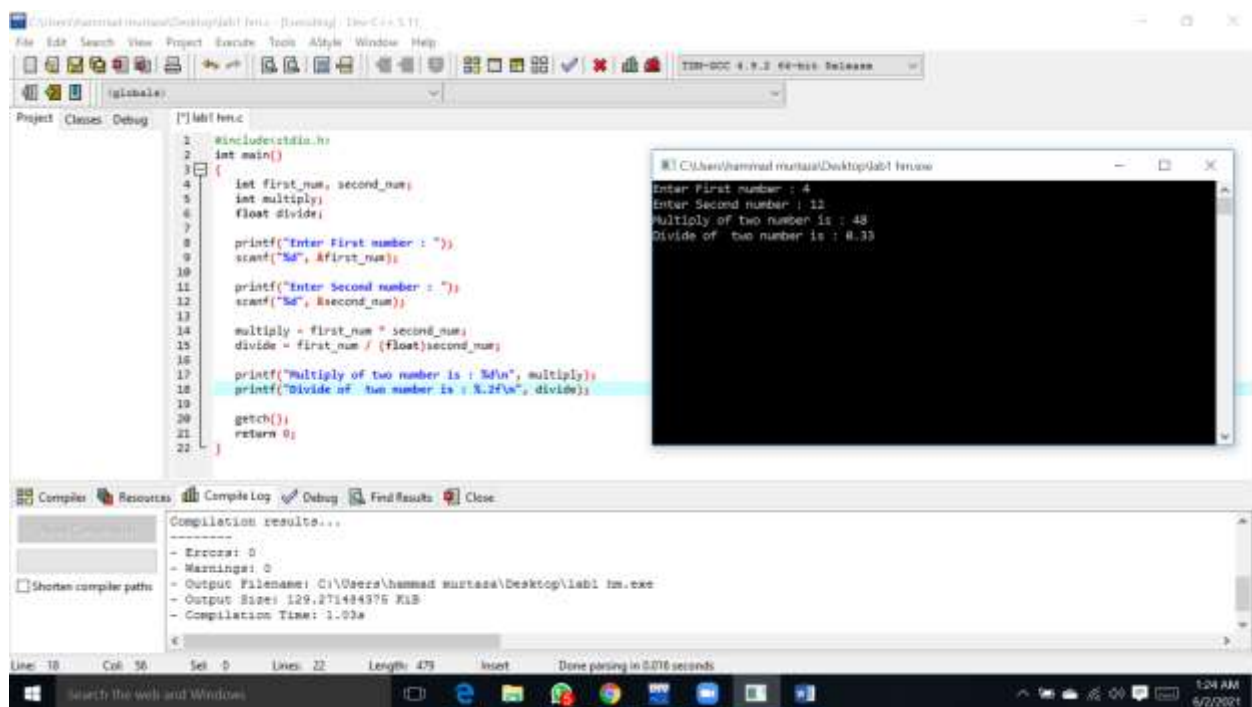
    multiply = first_num * second_num;
    divide = first_num / (float)second_num;
```

```
printf("Multiply of two number is : %d\n", multiply);  
printf("Divide of two number is : %.2f\n", divide);
```

```
getch();  
return 0;
```

```
}
```

## SCREENSHOT:



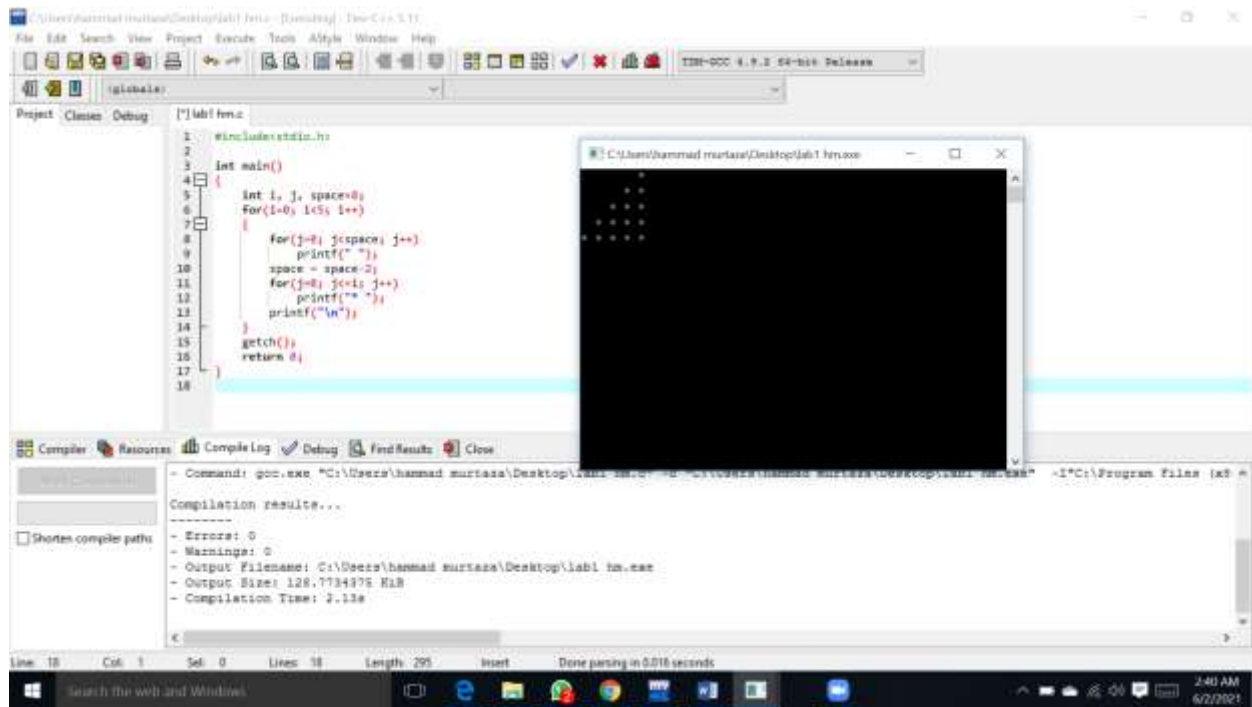
## Q2:

## CODE:

```
#include<stdio.h>
```

```
int main()
{
    int i, j, space=8;
    for(i=0; i<5; i++)
    {
        for(j=0; j<space; j++)
            printf(" ");
        space = space-2;
        for(j=0; j<=i; j++)
            printf("* ");
        printf("\n");
    }
    getch();
    return 0;
}
```

**SCREENSHOT:**



## Q3:

## CODE:

```
#include<stdio.h>
```

```
int main()
```

```
{
```

```
int a[10][10], b[10][10], mult[10][10], r1, c1, r2, c2, i, j, k;
```

```
printf("Enter rows and column for first matrix\n");
```

```
scanf("%d%d",&r1, &c1);
```

```
printf("Enter rows and column for second matrix\n");
```

```
scanf("%d%d",&r2, &c2);
```

```
while (c1!=r2)
{
    printf("Error! column of first matrix not equal to row of second.\n\n");

    printf("Enter rows and column for first matrix\n ");

    scanf("%d%d", &r1, &c1);

    printf("Enter rows and column for second matrix: ");

    scanf("%d%d",&r2, &c2);
}

printf("\n**Enter elements of matrix 1** \n");

for(i=0; i<r1; ++i)

for(j=0; j<c1; ++j)

{
    printf("Enter elements a%d%d: ",i+1,j+1);
    scanf("%d",&a[i][j]);
}

printf("\n**Enter elements of matrix 2** \n");

for(i=0; i<r2; ++i)
```

```
for(j=0; j<c2; ++j)

{
    printf("Enter elements b%d%d: ",i+1,j+1);
    scanf("%d",&b[i][j]);
}
```

```
for(i=0; i<r1; ++i)
```

```
for(j=0; j<c2; ++j)
{
    mult[i][j]=0;
}
```

```
for(i=0; i<r1; ++i)
```

```
for(j=0; j<c2; ++j)
```

```
for(k=0; k<c1; ++k)
```

```
{
    mult[i][j]+=a[i][k]*b[k][j];
}
```

```
printf("\no utput Matrix:\n");
```

```
for(i=0; i<r1; ++i)
```

```

for(j=0; j<c2; ++j)

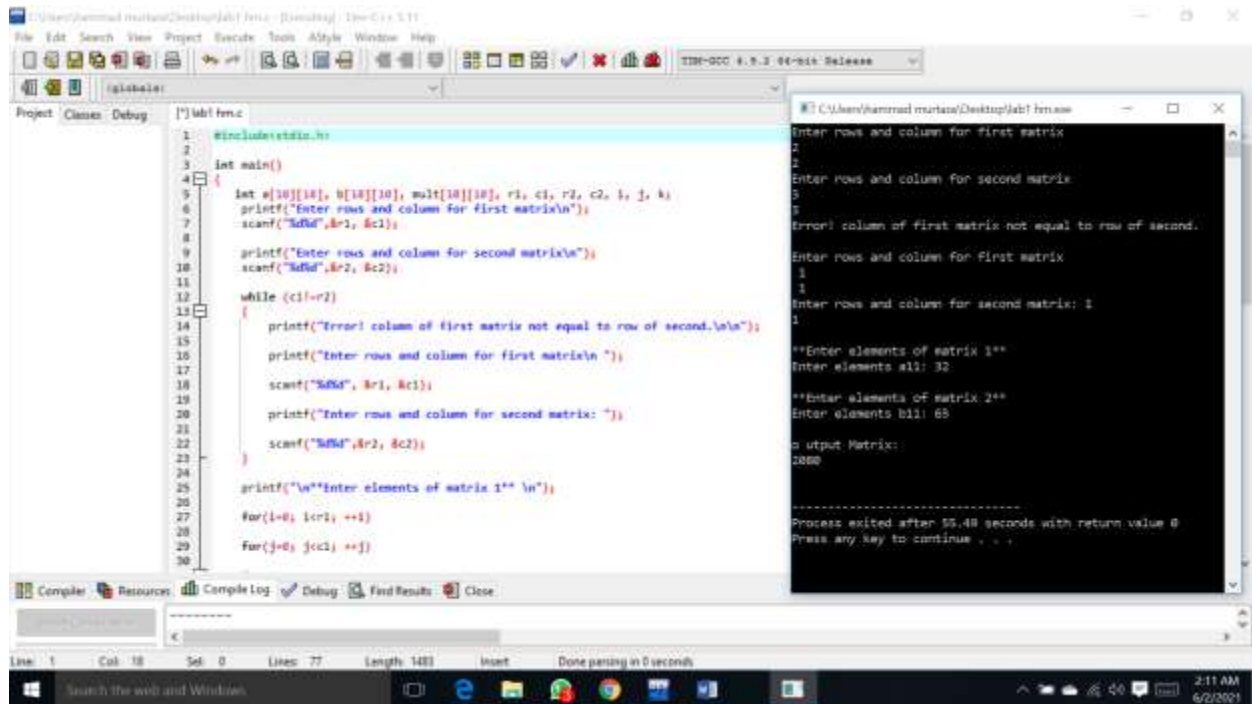
{
    printf("%d",mult[i][j]);

    if(j==c2-1)

        printf("\n\n");
}
return 0;
}

```

## SCREENSHOT:



```
C:\Users\hammad.murtaza\Desktop\lab1\hmc - [gcc] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
igichale
Project Classes Debug [?] lab1 hmc.c
30 {
31
32     printf("Enter elements a&id: ", i+1, j+1);
33     scanf("%d", &a[i][j]);
34 }
35
36 printf("\n**Enter elements of matrix 2** \n");
37
38 for(i=0; i<r1; ++i)
39
40     for(j=0; j<c2; ++j)
41
42     {
43         printf("Enter elements b&id: ", i+1, j+1);
44         scanf("%d", &b[i][j]);
45     }
46
47     for(i=0; i<r1; ++i)
48
49     for(j=0; j<c2; ++j)
50     {
51         mult[i][j]=0;
52     }
53     for(i=0; i<r1; ++i)
54
55     for(j=0; j<c2; ++j)
56
57     for(k=0; k<c1; ++k)
58
59 {
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77 }
```

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```
C:\Users\hammad.murtaza\Desktop\lab1\hmc - [gcc] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
igichale
Project Classes Debug [?] lab1 hmc.c
48
49     for(j=0; j<c2; ++j)
50     {
51         mult[i][j]=0;
52     }
53     for(i=0; i<r1; ++i)
54
55     for(j=0; j<c2; ++j)
56
57     for(k=0; k<c1; ++k)
58
59     {
60         mult[i][j]=a[i][k]*b[k][j];
61     }
62
63     printf("\n output Matrix:\n");
64
65     for(i=0; i<r1; ++i)
66
67     for(j=0; j<c2; ++j)
68
69     {
70         printf("%d", mult[i][j]);
71
72         if(j==c2-1)
73             printf("\n\n");
74     }
75     return 0;
76
77 }
```

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