```c
/* 1. Write a C program to perform Matrix Multiplication */
#include<stdio.h>
#include<stdlib.h>
int main(){
int a[10][10],b[10][10],mul[10][10],r,c,i,j,k;
system("cls");
printf("enter the number of row=");
scanf("%d",&r);
printf("enter the number of column=");
scanf("%d",&c);
printf("enter the first matrix element=\n");
for(i=0;i<r;i++)
{
for(j=0;j<c;j++)
{
scanf("%d",&a[i][j]);
}
}
printf("enter the second matrix element=\n");
for(i=0;i<r;i++)
{
for(j=0;j<c;j++)
{
scanf("%d",&b[i][j]);
}
}

printf("multiply of the matrix=\n");
for(i=0;i<r;i++)
{
for(j=0;j<c;j++)
{
mul[i][j]=0;
for(k=0;k<c;k++)
{
mul[i][j]+=a[i][k]*b[k][j];
}
}
}
//for printing result
for(i=0;i<r;i++)
{
for(j=0;j<c;j++)
{
```

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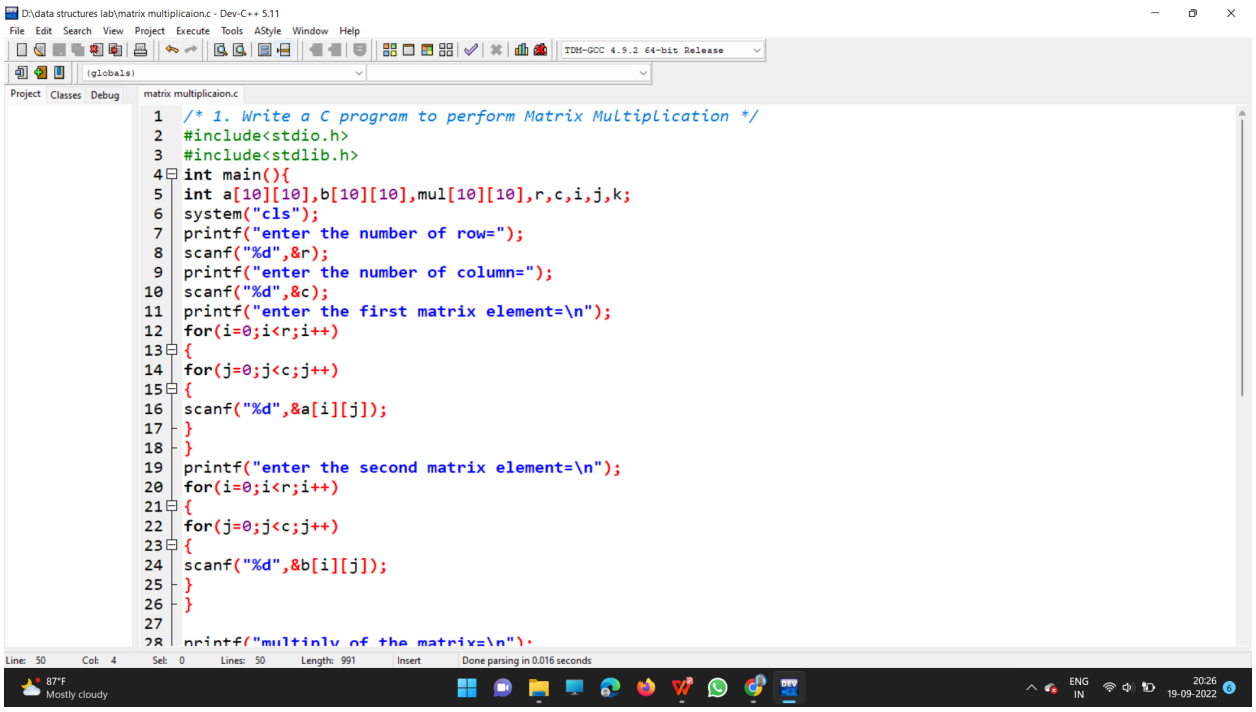
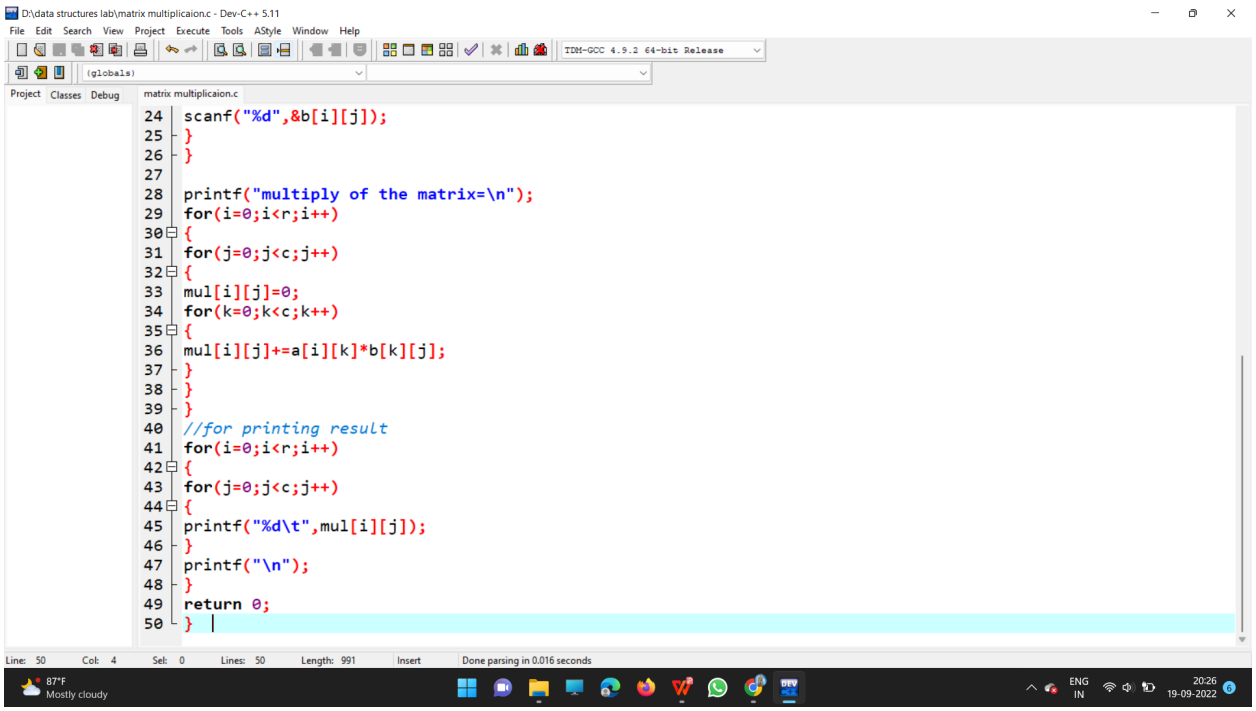
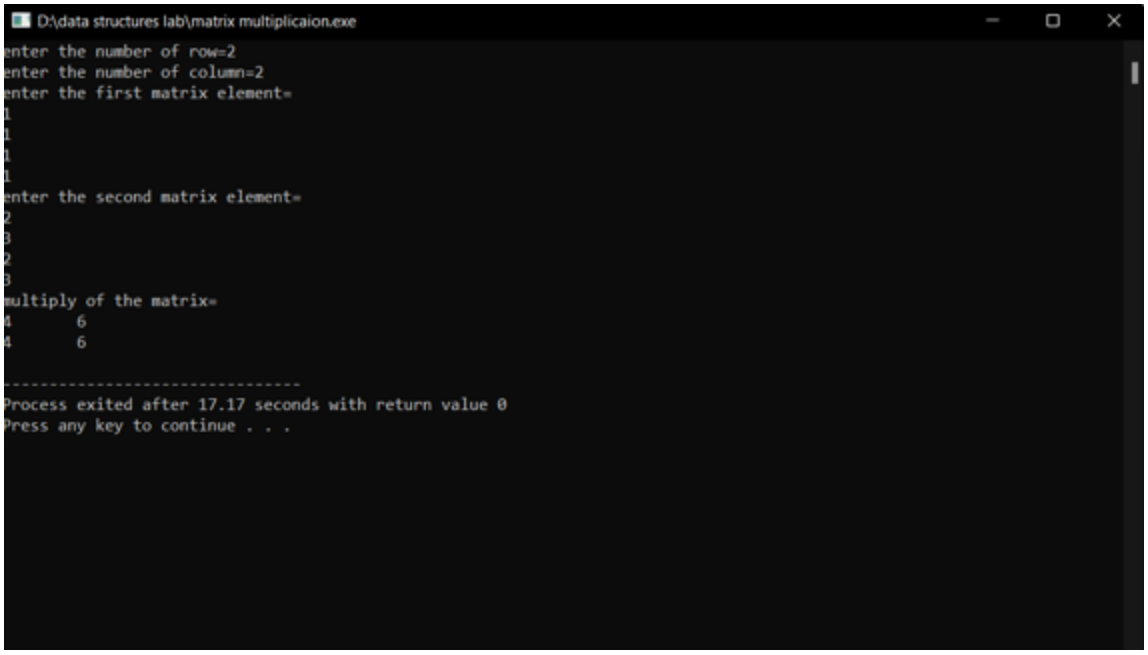
printf("%d\t",mul[i][j]);
}
printf("\n");
}
return 0;
}
```






D:\data structures lab\matrix multiplicaion.exe
enter the number of row=2
enter the number of column=2
enter the first matrix element=
1
1
1
1
enter the second matrix element=
2
3
2
3
multiply of the matrix=
4 6
4 6

Process exited after 17.17 seconds with return value 0
Press any key to continue . . .