

# PROGRAM 1:

```
#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(i=0;i<r;i++)
{
for(j=0;j<c;j++)
{
printf("%d\t",mul[i][j]);
}
printf("\n");
}

return 0;
}

```

## OUTPUT:

The screenshot shows the Dev-C++ IDE with the following components:

- Console Window:** Displays the execution of the program. It prompts the user to enter the number of rows (2), columns (2), and the first matrix element (1, 2, 3, 4). It then prompts for the second matrix element (5, 6, 7, 8). The output shows the resulting matrix:
 

```

multiply of the matrix=
19  22
43  50
      
```
- Compilation Results Window:** Shows the compilation status. It indicates that there are no errors or warnings. The output filename is C:\Users\A.V.NAGA KAVYA\Documents\ds1.exe, the output size is 130.11328125 KiB, and the compilation time is 0.22s.
 

```

Compilation results...
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- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\A.V.NAGA KAVYA\Documents\ds1.exe
- Output Size: 130.11328125 KiB
- Compilation Time: 0.22s
      
```
- IDE Interface:** The top menu bar includes File, Edit, Search, View, Project, Execute, Tools, AStyle, Window, and Help. The status bar at the bottom shows the current line (5), column (16), and other IDE metrics.