

1.MATRIX MULTIPLICATION:-

Code:-

```
#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:-

```

enter the number of row=3
enter the number of column=1
enter the first matrix element=
4
4
5
enter the second matrix element=
7
8
9
multiply of the matrix=
28
28
35

-----
Process exited after 26.19 seconds with return value 0
Press any key to continue . . .

```