

Developing and executing 'C' programs to perform the following operation in Matrix

a) Addition

b) Subtraction

Exercise 1: Write a C program to add two Matrices

```
/*ADDITION OF TWO MATRICES*/
#include<stdio.h>
#include<conio.h>
void main()
{
    int a[5][5],b[5][5],c[5][5];
    int m,n,i,j;
    clrscr();
    printf("\n ENTER THE ORDER OF MATRIX:");
    scanf("%d%d",&m,&n);
    /*Read First Matrix Elements*/
    printf("\n ENETR THE ELEMENTS OF FIRST MATRIX:\n");
    for(i=0;i<m;i++)
    {
        for(j=0;j<n;j++)
        {
            scanf("%d",&a[i][j]);
        }
    }
    /*Read Second Matrix Elements*/
    printf("\n ENTER THE ELEMENTS OF SECOND MATRIX:\n");
    for(i=0;i<m;i++)
    {
        for(j=0;j<n;j++)
        {
            scanf("%d",&b[i][j]);
        }
    }
    /*Add two Matrices*/
    for(i=0;i<m;i++)
    {
        for(j=0;j<n;j++)
        {
            c[i][j]=a[i][j]+b[i][j];
        }
    }
    /*Display First Matrix */
    printf("\nTHE FIRST MATRIX ELEMENTS ARE:\n");
    for(i=0;i<m;i++)
    {
        for(j=0;j<n;j++)
        {
            printf("%d\t",a[i][j]);
        }
    }
}
```

```

        }
        printf("\n");
    }
    /*Display Second Matrix */
    printf("\nTHE SECOND MATRIX ELEMENTS ARE:\n");
    for(i=0;i<m;i++)
    {
        for(j=0;j<n;j++)
        {
            printf("%d\t",b[i][j]);

        }
        printf("\n");
    }
    /*Display Addition (Result) Matrix */
    printf("\nTHE RESULTANT MATRIX:\n");
    for(i=0;i<m;i++)
    {
        for(j=0;j<n;j++)
        {
            printf("%d\t",c[i][j]);

        }
        printf("\n");
    }
    getch();
}/* main */

```

Output:

Exercise 2: Write a C program to subtract two Matrices