

LAB-7-EVALUATION PROGRAMS

PROGRAM-1-ADDITION OF TWO MATRICES

```
// ADDITION OF TWO MATRICES
#include<stdio.h>
int main()
{
    int i,j,r,c,a[10][10], b[10][10];
    int add[10][10];

    printf("Please Enter Number of rows and columns = ");
    scanf("%d %d", &i, &j);

    printf("Please Enter the First Matrix Elements\n");
    for(r=0;r<i;r++)
    {
        for(c=0;c<j;c++)
        {
            scanf("%d",&a[r][c]);
        }
    }

    printf("\nPlease Enter the Second Matrix Elements\n");
    for(r=0; r<i;r++)
    {
        for(c=0;c<j;c++)
        {
            scanf("%d", &b[r][c]);
        }
    }

    for(r=0;r<i;r++)
    {
        for(c=0;c<j;c++)
        {
            add[r][c] = a[r][c] + b[r][c];
        }
    }

    printf("The Sum of Two Matrix a and b = a + b \n");
    for(r=0;r<i;r++)
    {
        for(c=0;c<j;c++)
        {
            printf("%d \t ", add[r][c]);
        }
        printf("\n");
    }
    return 0;
}
```

OUTPUTS:

```
Please Enter Number of rows and columns = 3 3
Please Enter the First Matrix Elements
1 1 1
2 2 2
3 3 3

Please Enter the Second Matrix Elements
1 0 0
0 1 0
0 0 1
The Sum of Two Matrix a and b = a + b
2      1      1
2      3      2
3      3      4

Process returned 0 (0x0)   execution time : 25.477 s
Press any key to continue.
```

```
Please Enter Number of rows and columns = 2 2
Please Enter the First Matrix Elements
20 20
20 20

Please Enter the Second Matrix Elements
30 30
30 30
The Sum of Two Matrix a and b = a + b
50      50
50      50

Process returned 0 (0x0)   execution time : 41.321 s
Press any key to continue.
```

PROGRAM-2-READING 2-D ARRAY (HIGHEST MARKS)

```
// HIGHEST MARKS USING 2D ARRAY
#include<stdio.h>
#include<conio.h>
int main()
{
    int m[4][3], i, j, max;
    for (i=0; i<4; i++)
    {
        printf("Enter the marks obtained by student %d", i);
        for (j=0; j<3; j++)
        {
            printf("\nMarks[%d][%d] = ", i, j);
            scanf("%d", &m[i][j]);
        }
        for (j=0; j<3; j++)
        {
            max=m[0][j];
            for (i=1; i<4; i++)
            {
                if (m[i][j]>max)
                {
                    max=m[i][j];
                }
            }
            printf("Highest marks in the subject %d = %d\n", j, max);
        }
        return 0;
    }
}
```

OUTPUTS:

```
Enter the marks obtained by student 0
Marks[0][0] = 90
Marks[0][1] = 89
Marks[0][2] = 100
Enter the marks obtained by student 1
Marks[1][0] = 68
Marks[1][1] = 80
Marks[1][2] = 99
Enter the marks obtained by student 2
Marks[2][0] = 45
Marks[2][1] = 67
Marks[2][2] = 56
Enter the marks obtained by student 3
Marks[3][0] = 48
Marks[3][1] = 69
Marks[3][2] = 70
Highest marks in the subject 0 = 90
Highest marks in the subject 1 = 89
Highest marks in the subject 2 = 100
Process returned 0 (0x0)   execution time : 52.568 s
Press any key to continue.
```

```
Enter the marks obtained by student 0
Marks[0][0] = 60
Marks[0][1] = 40
Marks[0][2] = 45
Enter the marks obtained by student 1
Marks[1][0] = 75
Marks[1][1] = 62
Marks[1][2] = 80
Enter the marks obtained by student 2
Marks[2][0] = 34
Marks[2][1] = 90
Marks[2][2] = 47
Enter the marks obtained by student 3
Marks[3][0] = 62
Marks[3][1] = 83
Marks[3][2] = 82
Highest marks in the subject 0 = 75
Highest marks in the subject 1 = 90
Highest marks in the subject 2 = 82
Process returned 0 (0x0)   execution time : 106.732 s
Press any key to continue.
```