

Practical 2: Write a program to add and subtract two matrices

```
#include<iostream>

using namespace std;

void entry(int a[2][2]);

void display(int a[2][2]);

void add(int a[2][2],int b[2][2]);

void sub(int a[2][2],int b[2][2]);

int main()
{
    int a[2][2], b[2][2];
    cout<<"For array A:";
    entry(a);
    cout<<"For array B:";
    entry(b);
    cout<<"Array A:\n";
    display(a);
    cout<<"Array B:\n";
    display(b);
    add(a,b);
    sub(a,b);
    return 0;
}

void entry(int a[2][2])
{
    for(int i=0;i<2;i++)
        for(int j=0;j<2;j++)
        {
```

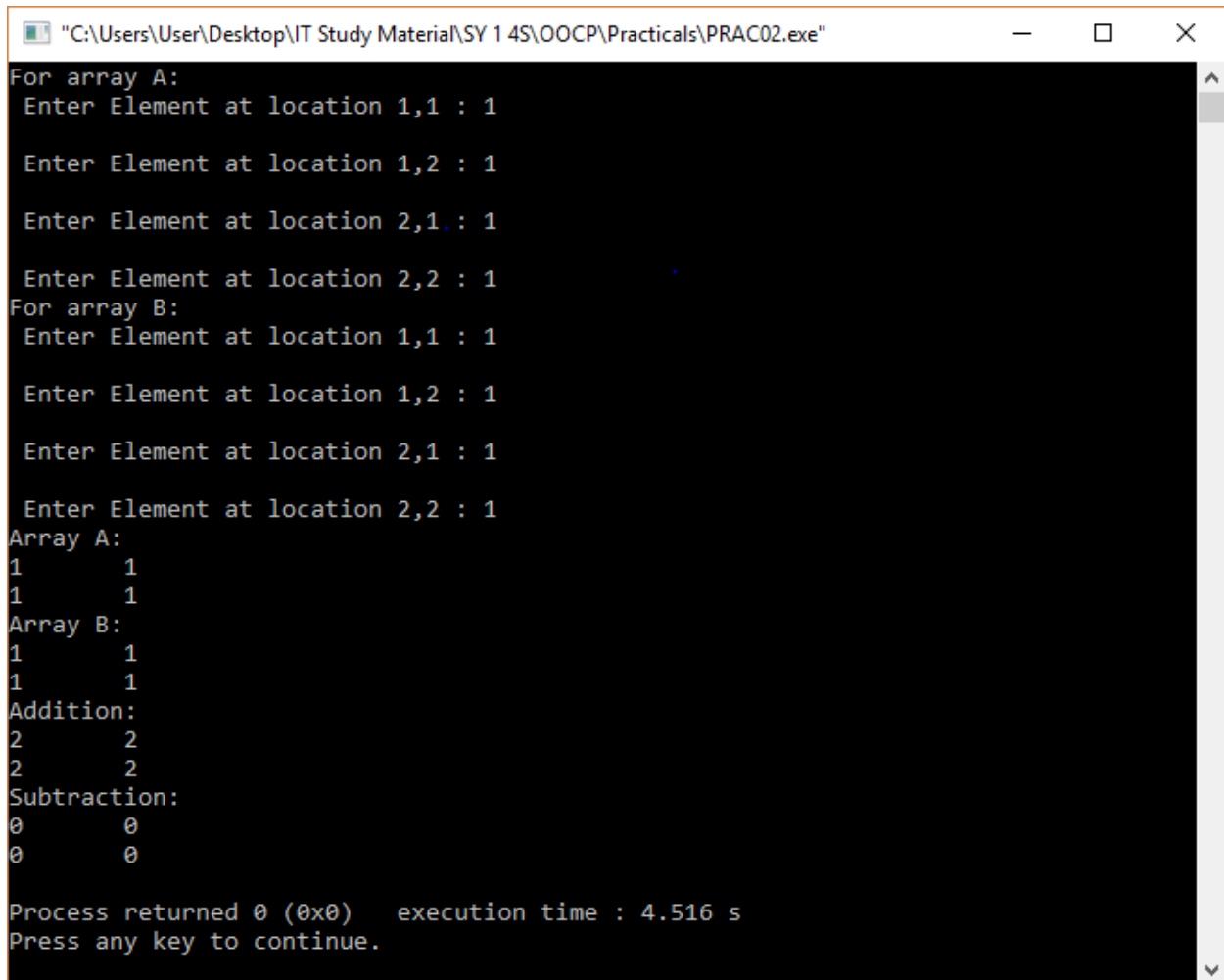
```
        cout<<"\n Enter Element at location "<<i+1<<","<<j+1<<" : ";
        cin>>a[i][j];
    }
}

void display(int a[2][2])
{
    for(int i=0;i<2;i++)
    {
        for(int j=0;j<2;j++)
        {
            cout<<a[i][j]<<"\t";
        }
        cout<<endl;
    }
}

void add(int a[2][2], int b[2][2])
{
    int c[2][2];
    for(int i=0;i<2;i++)
        for(int j=0;j<2;j++)
        {
            c[i][j]=(a[i][j] + b[i][j]);
        }
    cout<<"Addition:\n";
    display(c);
}

void sub(int a[2][2], int b[2][2])
```

```
{  
    int c[2][2];  
    for(int i=0;i<2;i++)  
        for(int j=0;j<2;j++)  
        {  
            c[i][j]=(a[i][j] - b[i][j]);  
        }  
    cout<<"Subtraction:\n" ;  
    display(c);  
}
```



```
"C:\Users\User\Desktop\IT Study Material\SY 1 4S\OOCPracticals\PRAC02.exe"  
For array A:  
Enter Element at location 1,1 : 1  
Enter Element at location 1,2 : 1  
Enter Element at location 2,1 : 1  
Enter Element at location 2,2 : 1  
For array B:  
Enter Element at location 1,1 : 1  
Enter Element at location 1,2 : 1  
Enter Element at location 2,1 : 1  
Enter Element at location 2,2 : 1  
Array A:  
1      1  
1      1  
Array B:  
1      1  
1      1  
Addition:  
2      2  
2      2  
Subtraction:  
0      0  
0      0  
  
Process returned 0 (0x0)   execution time : 4.516 s  
Press any key to continue.
```