

Experiment No.1

Input:

```
#include<iostream>

using namespace std;

class student
{
    private:
        string nm,branch;
        int rn;
    public:
        void getdata()
        {
            cout<<"Enter name of student:";

            cin>>nm;

            cout<<"Enter roll no:";

            cin>>rn;

            cout<<"Enter branch:";

            cin>>branch;
        }
        void showdata()
        {
            cout<<"***** STUDENT INFORMATION *****"<<endl;

            cout<<"Name:"<<nm<<endl;

            cout<<"Roll no:"<<rn<<endl;

            cout<<"Branch:"<<branch<<endl;
        }
};

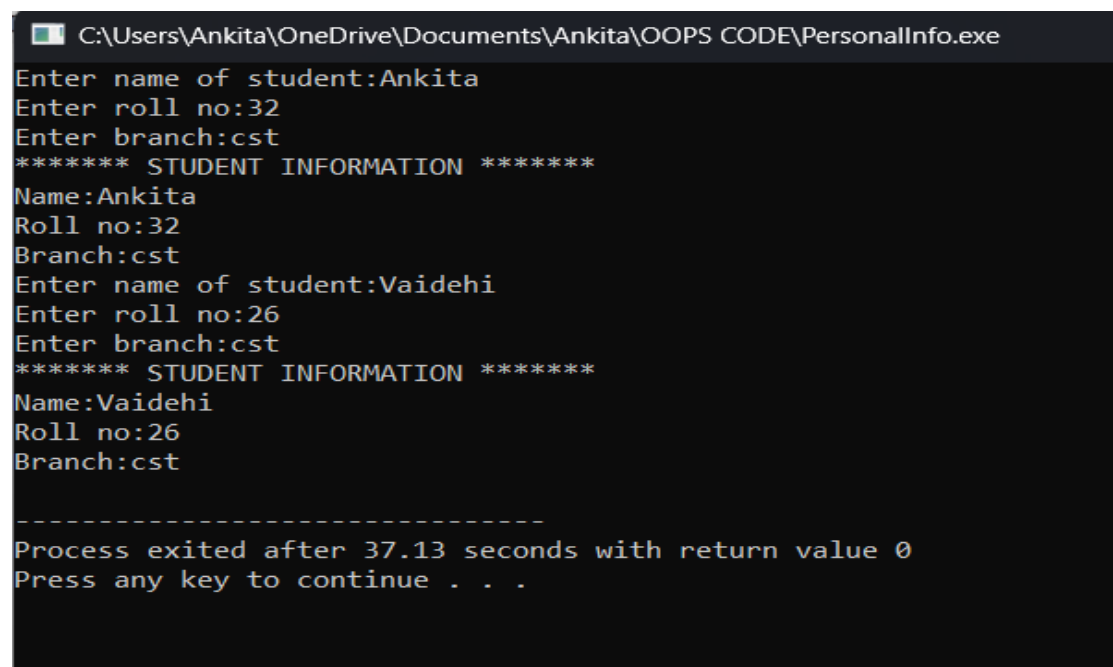
int main()
```

```

{
    student s,t;
    s.getdata();
    s.showdata();
    t.getdata();
    t.showdata();
    return 0;
}

```

Output:



```

C:\Users\Ankita\OneDrive\Documents\Ankita\OOPS CODE\PersonalInfo.exe
Enter name of student:Ankita
Enter roll no:32
Enter branch:cst
***** STUDENT INFORMATION *****
Name:Ankita
Roll no:32
Branch:cst
Enter name of student:Vaidehi
Enter roll no:26
Enter branch:cst
***** STUDENT INFORMATION *****
Name:Vaidehi
Roll no:26
Branch:cst

-----
Process exited after 37.13 seconds with return value 0
Press any key to continue . . .

```

Input:

```

#include<iostream>

using namespace std;

class car
{
    private:
        string nm,color;

```

```

        int avg;
public:
void getdata()
{
    cout<<"Enter name of car:";
    cin>>nm;
    cout<<"Enter color:";
    cin>>color;
    cout<<"Enter average speed:";
    cin>>avg;
}
void showdata()
{
    cout<<"***** CAR INFORMATION *****"<<endl;
    cout<<"Name:"<<nm<<endl;
    cout<<"Color:"<<color<<endl;
    cout<<"Average speed:"<<avg<<endl;
}
};
int main()
{
    car c,t;
    c.getdata();
    c.showdata();
    t.getdata();
    t.showdata();
    return 0;
}

```

Output:

```
C:\Users\Ankita\OneDrive\Documents\Ankita\OOPS CODE\CarInfo.exe
Enter name of car:Lamborghini
Enter color:black
Enter average speed:221
***** CAR INFORMATION *****
Name:Lamborghini
Color:black
Average speed:221
Enter name of car:BenZ
Enter color:black
Enter average speed:240
***** CAR INFORMATION *****
Name:BenZ
Color:black
Average speed:240

-----
Process exited after 268.1 seconds with return value 0
Press any key to continue . . .
```

Input:

```
#include<iostream>

using namespace std;

class time
{
    private:
        int m,h,s;
    public:
        void getdata()
        {
            cout<<"Enter Hour:";
            cin>>h;
            cout<<"Enter Minutes:";
            cin>>m;
            cout<<"Enter Seconds:";
            cin>>s;
        }
}
```

```

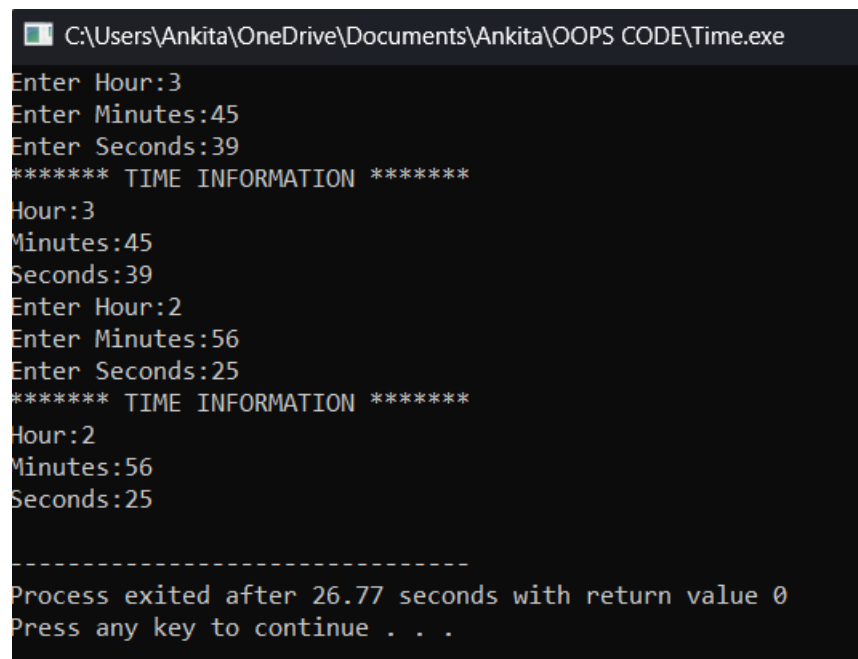
void showdata()
{
    cout<<"***** TIME INFORMATION *****"<<endl;
    cout<<"Hour:"<<h<<endl;
    cout<<"Minutes:"<<m<<endl;
    cout<<"Seconds:"<<s<<endl;
}

};

int main()
{
    time t,d;
    t.getdata();
    t.showdata();
    d.getdata();
    d.showdata();
    return 0;
}

```

Output:



```

C:\Users\Ankita\OneDrive\Documents\Ankita\OOPS CODE\Time.exe
Enter Hour:3
Enter Minutes:45
Enter Seconds:39
***** TIME INFORMATION *****
Hour:3
Minutes:45
Seconds:39
Enter Hour:2
Enter Minutes:56
Enter Seconds:25
***** TIME INFORMATION *****
Hour:2
Minutes:56
Seconds:25
-----
Process exited after 26.77 seconds with return value 0
Press any key to continue . . .

```

Input:

```
#include<iostream>

using namespace std;

class year
{
    private:
        int y;
        string d, m;
    public:
        void getdata()
        {
            cout<<"Enter Year:";
            cin>>y;
            cout<<"Enter Month:";
            cin>>m;
            cout<<"Enter Day:";
            cin>>d;
        }
        void showdata()
        {
            cout<<"***** Year INFORMATION *****"<<endl;
            cout<<"Year:"<<y<<endl;
            cout<<"Month:"<<m<<endl;
            cout<<"Day:"<<d<<endl;
        }
};

int main()
{
```

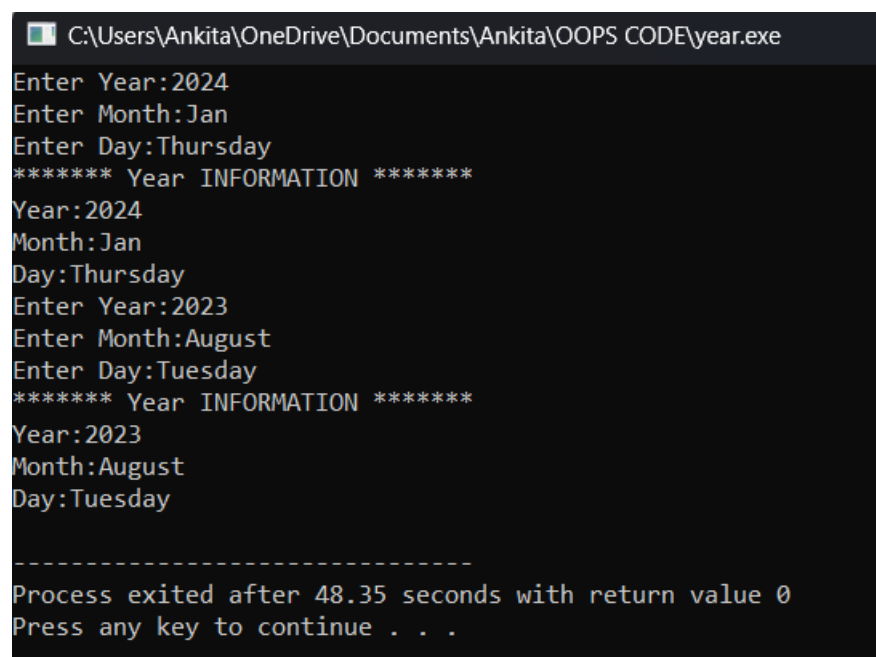
```

    year y,d;
    y.getdata();
    y.showdata();
    d.getdata();
    d.showdata();

    return 0;
}

```

Output:



```

C:\Users\Ankita\OneDrive\Documents\Ankita\OOPS CODE\year.exe
Enter Year:2024
Enter Month:Jan
Enter Day:Thursday
***** Year INFORMATION *****
Year:2024
Month:Jan
Day:Thursday
Enter Year:2023
Enter Month:August
Enter Day:Tuesday
***** Year INFORMATION *****
Year:2023
Month:August
Day:Tuesday
-----
Process exited after 48.35 seconds with return value 0
Press any key to continue . . .

```

Input:

```

#include<iostream>

using namespace std;

class matrix
{
    private :

        int i,j,r,c,m1[10][10],m2[10][10],m3[10][10];

    public :

        void getdata()

```

```
{  
    cout<<"Enter the number of rows:";  
    cin>>r;  
    cout<<"Enter the number of coloumns :";  
    cin>>c;  
    cout<<"Enter the elements of 1st matrix :";  
    for(i=0;i<r;i++)  
    {  
        for(j=0;j<c;j++)  
        {  
            cin>>m1[i][j];  
        }  
    }  
    cout<<"Enter the elements of 2nd matrix :";  
    for(i=0;i<r;i++)  
    {  
        for(j=0;j<c;j++)  
        {  
            cin>>m2[i][j];  
        }  
    }  
    for(i=0;i<r;i++)  
    {  
        for(j=0;j<c;j++)  
        {  
            m3[i][j]=m1[i][j]+m2[i][j];  
        }  
        cout<<"\n";  
    }  
}
```



```
}  
void showdata()  
{  
    cout<<"\n The 1st matrix is:\n";  
    for(i=0;i<r;i++)  
    {  
        for(j=0;j<c;j++)  
        {  
            cout<<"\t"<<m1[i][j];  
        }  
        cout<<"\n";  
    }  
    cout<<" The 2nd matrix is:\n";  
    for(i=0;i<r;i++)  
    {  
        for(j=0;j<c;j++)  
        {  
            cout<<"\t"<<m2[i][j];  
        }  
        cout<<"\n";  
    }  
    cout<<"The addition of 2 matrices is :\n";  
    for(i=0;i<r;i++)  
    {  
        for(j=0;j<c;j++)  
        {  
            cout<<"\t"<<m3[i][j];  
        }  
        cout<<"\n";  
    }
```

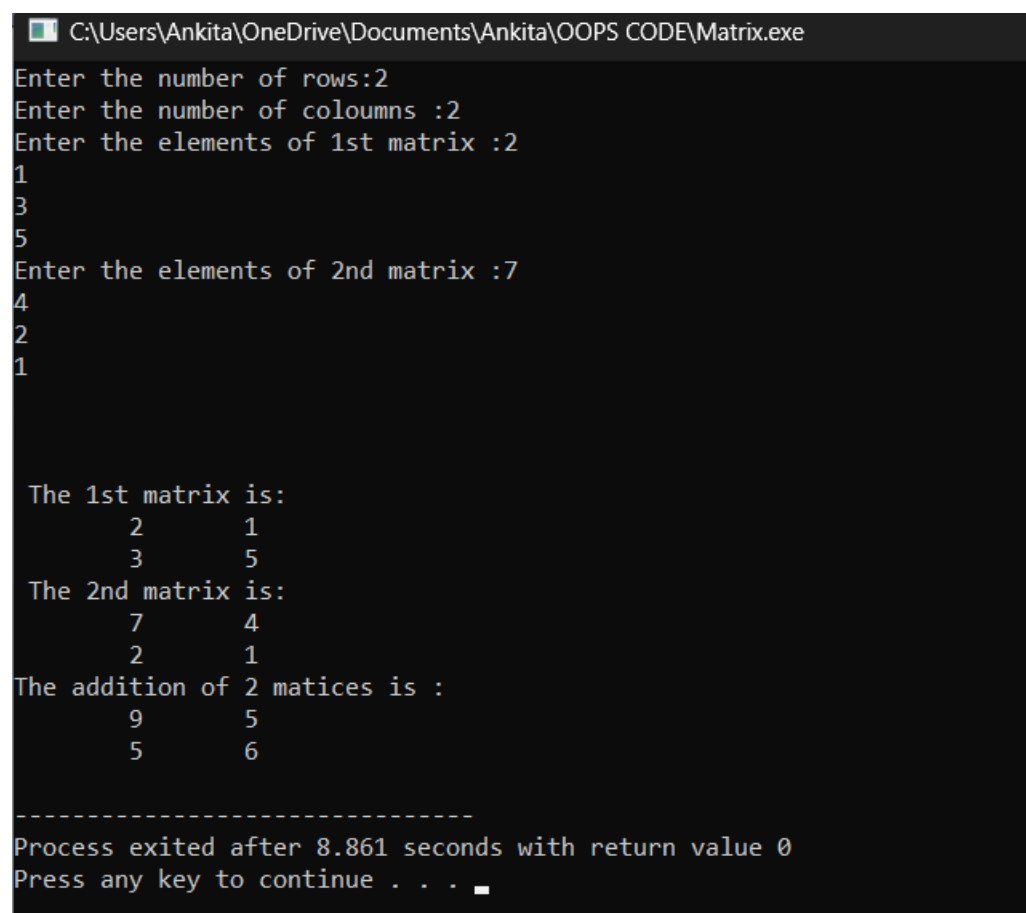
```

    }
}
};

int main()
{
    matrix m;
    m.getdata();
    m.showdata();
    return 0;
}

```

Output:



The screenshot shows a Windows command prompt window titled "C:\Users\Ankita\OneDrive\Documents\Ankita\OOPS CODE\Matrix.exe". The program prompts the user to enter the number of rows (2) and columns (2). It then asks for the elements of the first matrix, which are entered as 1, 3, and 5. Next, it asks for the elements of the second matrix, which are entered as 4, 2, and 1. The program then displays the two matrices and their sum.

```

C:\Users\Ankita\OneDrive\Documents\Ankita\OOPS CODE\Matrix.exe
Enter the number of rows:2
Enter the number of coloumns :2
Enter the elements of 1st matrix :2
1
3
5
Enter the elements of 2nd matrix :7
4
2
1

The 1st matrix is:
    2    1
    3    5
The 2nd matrix is:
    7    4
    2    1
The addition of 2 matices is :
    9    5
    5    6

-----
Process exited after 8.861 seconds with return value 0
Press any key to continue . . .

```