

## PROGRAMMING EXERCISE

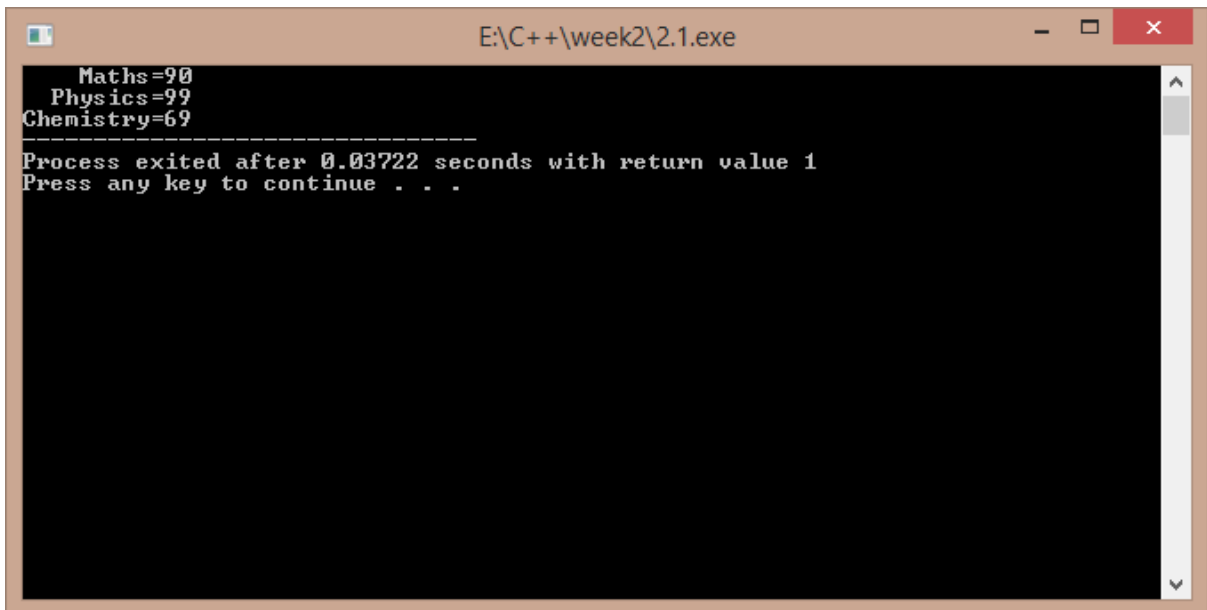
2.1)

```
#include<iostream>

using namespace std;

int main()
{
    cout<<" Maths=90\n Physics=99\nChemistry=69";

    return 1;
}
```

A screenshot of a Windows command prompt window. The title bar at the top reads "E:\C++\week2\2.1.exe" and includes standard Windows window controls (minimize, maximize, close). The command prompt has a black background with white text. The output of the program is displayed as follows: "Maths=90", "Physics=99", and "Chemistry=69" on three separate lines. Below these lines, a horizontal dashed line is shown. Underneath the dashed line, the text "Process exited after 0.03722 seconds with return value 1" is displayed, followed by "Press any key to continue . . .". A vertical scrollbar is visible on the right side of the command prompt window.

```
Maths=90
Physics=99
Chemistry=69
-----
Process exited after 0.03722 seconds with return value 1
Press any key to continue . . .
```

2.2)

```
#include<iostream>

using namespace std;

int main()
```

```

{
    int a,b;

    cout<<"enter two numbers : ";

    cin>>a>>b;

    if(a>b)

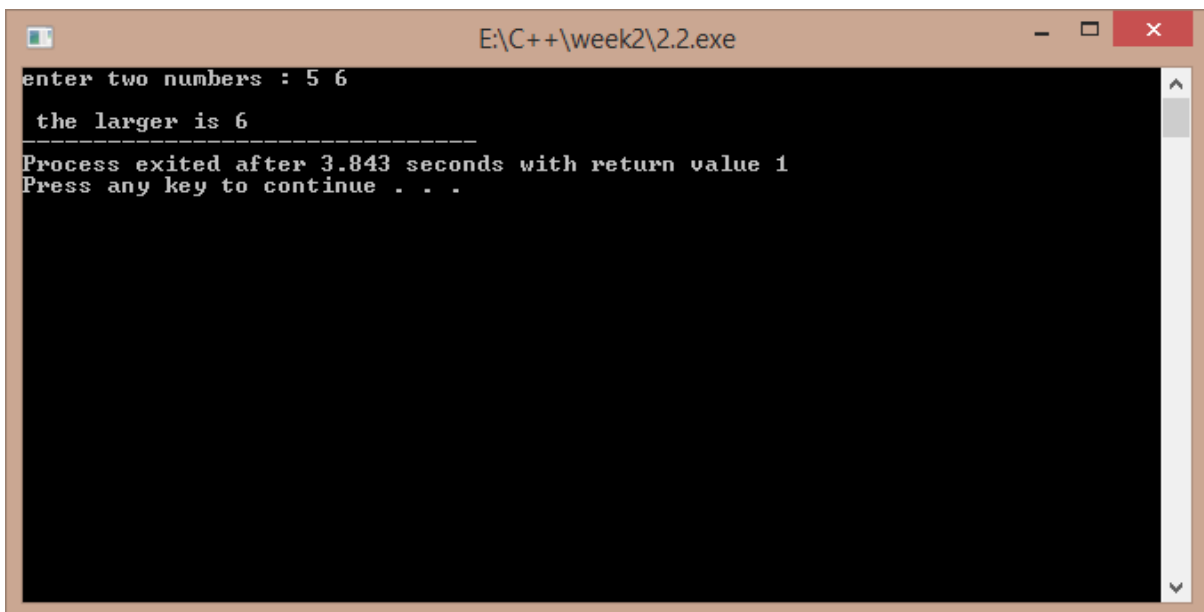
        cout<<"\nthe larger is "<<a;

    else

        cout<<"\n the larger is "<<b;

    return 1;
}

```



```

E:\C++\week2\2.2.exe
enter two numbers : 5 6
the larger is 6
-----
Process exited after 3.843 seconds with return value 1
Press any key to continue . . .

```

2.3)

```

#include<iostream>

using namespace std;

int main()
{

    char ch;

```

```

        cout<<"enter a character : ";

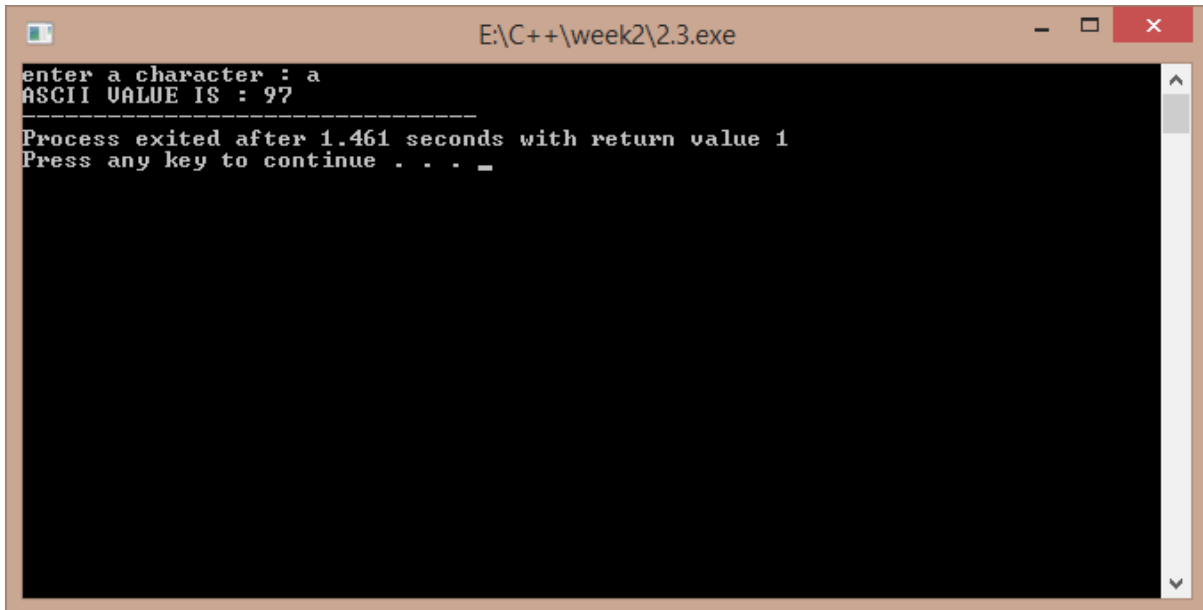
        cin>>ch;

        cout<<"ASCII VALUE IS : "<<(int)ch;

        return 1;

}

```



```

E:\C++\week2\2.3.exe
enter a character : a
ASCII VALUE IS : 97
-----
Process exited after 1.461 seconds with return value 1
Press any key to continue . . . _

```

2.4)

```

#include<iostream>

using namespace std;

int main()
{
    cout<<"enter a,b,c : ";

    int a,b,c,x;

    cin>>a>>b>>c;

    x=a/b-c;

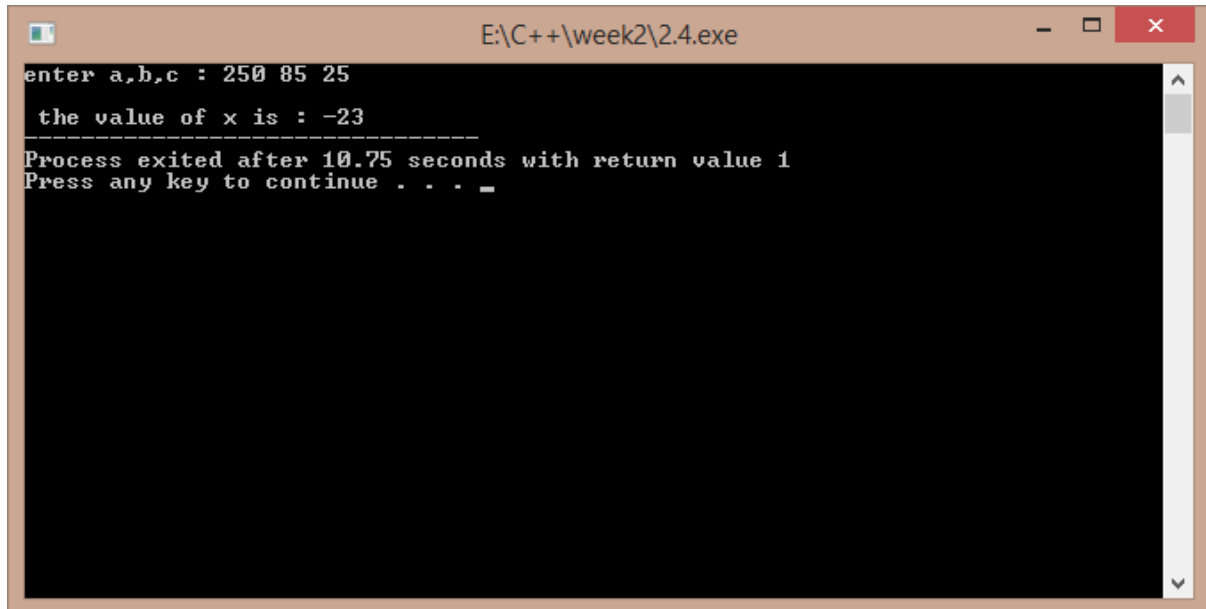
    cout<<"\n the value of x is : "<<x;

    return 1;
}

```

}

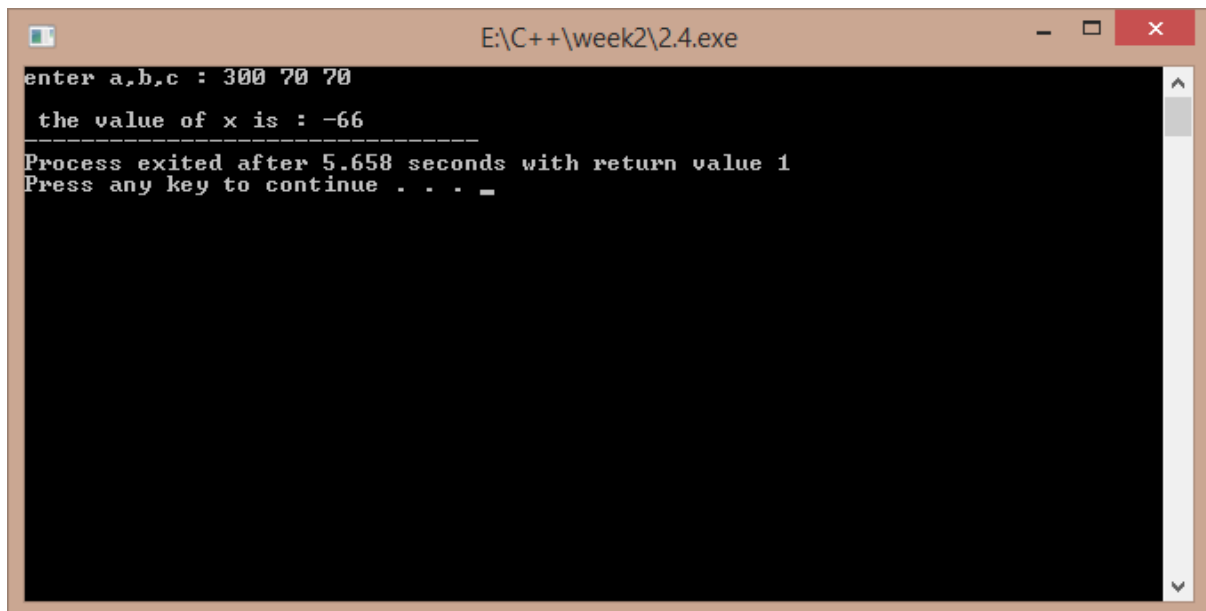
a)



The screenshot shows a Windows command prompt window titled "E:\C++\week2\2.4.exe". The prompt is "enter a,b,c :". The user has entered "250 85 25". The program outputs "the value of x is : -23". Below this, a separator line is shown, followed by the message "Process exited after 10.75 seconds with return value 1" and "Press any key to continue . . . \_".

```
enter a,b,c : 250 85 25
the value of x is : -23
-----
Process exited after 10.75 seconds with return value 1
Press any key to continue . . . _
```

b)



The screenshot shows a Windows command prompt window titled "E:\C++\week2\2.4.exe". The prompt is "enter a,b,c :". The user has entered "300 70 70". The program outputs "the value of x is : -66". Below this, a separator line is shown, followed by the message "Process exited after 5.658 seconds with return value 1" and "Press any key to continue . . . \_".

```
enter a,b,c : 300 70 70
the value of x is : -66
-----
Process exited after 5.658 seconds with return value 1
Press any key to continue . . . _
```

2.5)

#include<iostream>

```

using namespace std;

int main()
{
    float c,f;

    cout<<"enter the temp in fahrenheit : ";

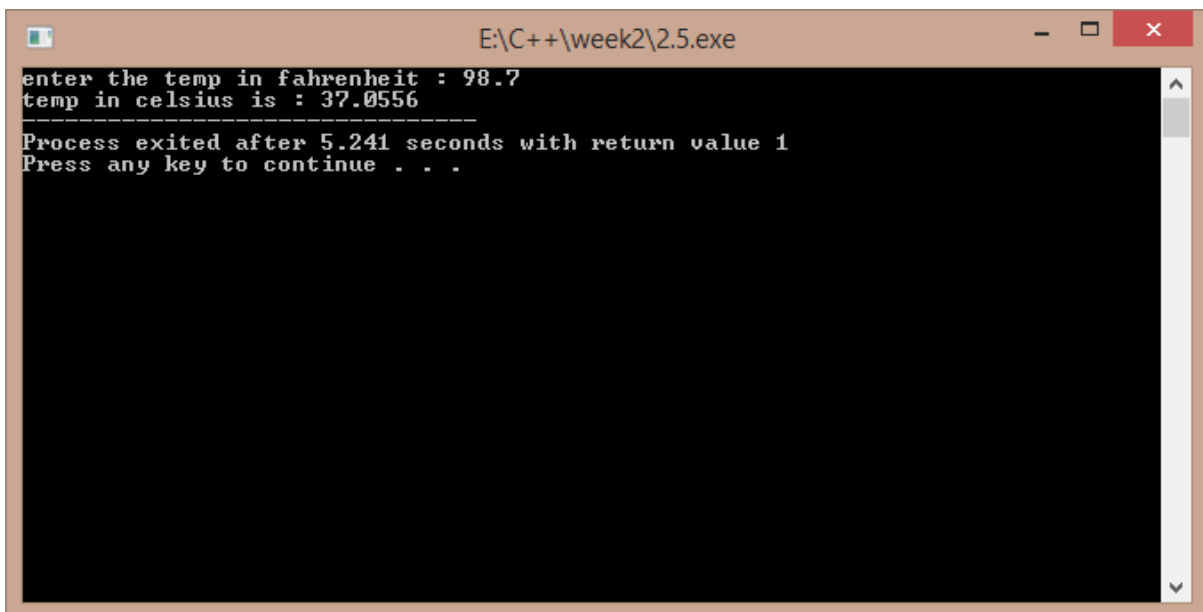
    cin>>f;

    c=(5/9)*(f-32);

    cout<<"temp in celsius is : "<<c;

    return 1;
}

```



```

E:\C++\week2\2.5.exe
enter the temp in fahrenheit : 98.7
temp in celsius is : 37.0556
-----
Process exited after 5.241 seconds with return value 1
Press any key to continue . . .

```

2.6)

```

#include<iostream>

using namespace std;

class temp
{
    float f,c;

```

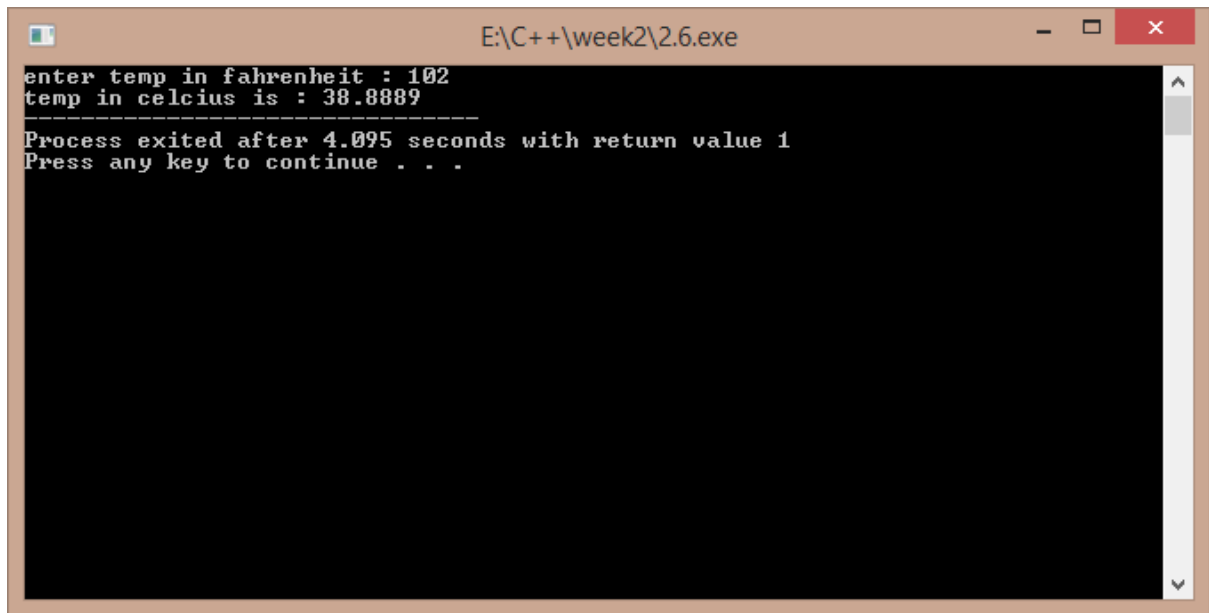
```
        public:
            void get();
            void cel();
};

void temp::get()
{
    cout<<"enter temp in fahrenheit : ";
    cin>>f;
}

void temp::cel()
{
    c=5*(f-32)/9;
    cout<<"temp in celcius is : "<<c;
}

int main()
{
    temp t;
    t.get();
    t.cel();

    return 1;
}
```



```
E:\C++\week2\2.6.exe
enter temp in fahrenheit : 102
temp in celcius is : 38.8889
-----
Process exited after 4.095 seconds with return value 1
Press any key to continue . . .
```

## DEBUGGING EXERCISE

2.1)

```
#include<iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int i=0;
```

```
    i=i+1;
```

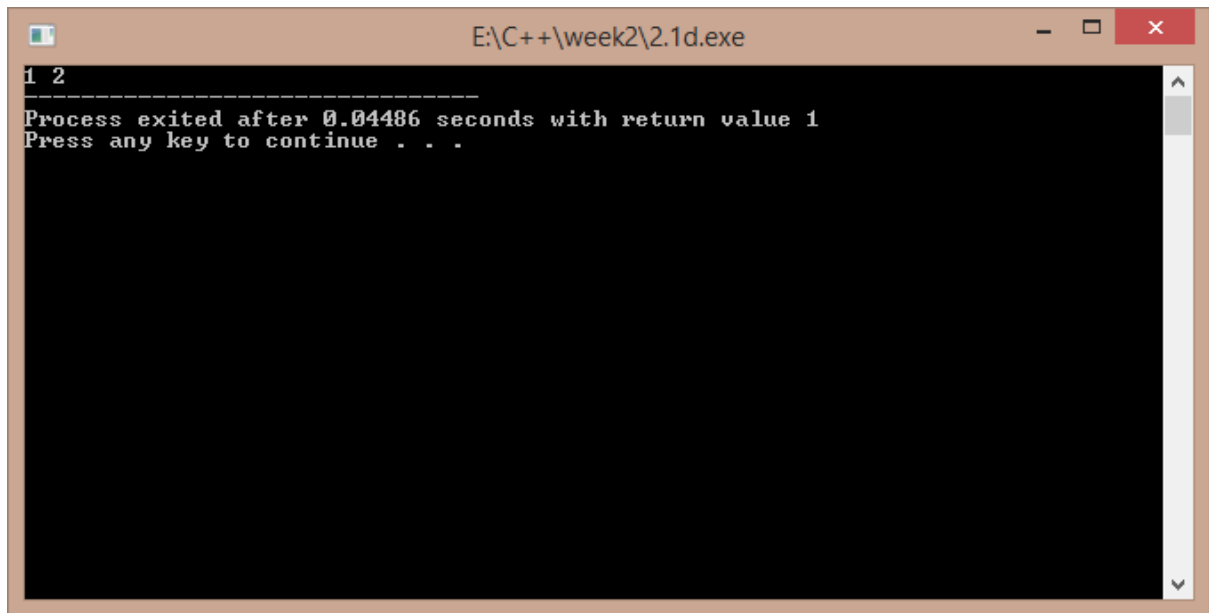
```
    cout<<i<<" ";
```

```
    /*comment\*/i=i+1;
```

```
    cout<<i;
```

```
}
```

‘ / ‘ should be removed from the 7<sup>th</sup> line



```
1 2
-----
Process exited after 0.04486 seconds with return value 1
Press any key to continue . . .
```

2.2)

```
#include<iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    short i=2500,j=3000;
```

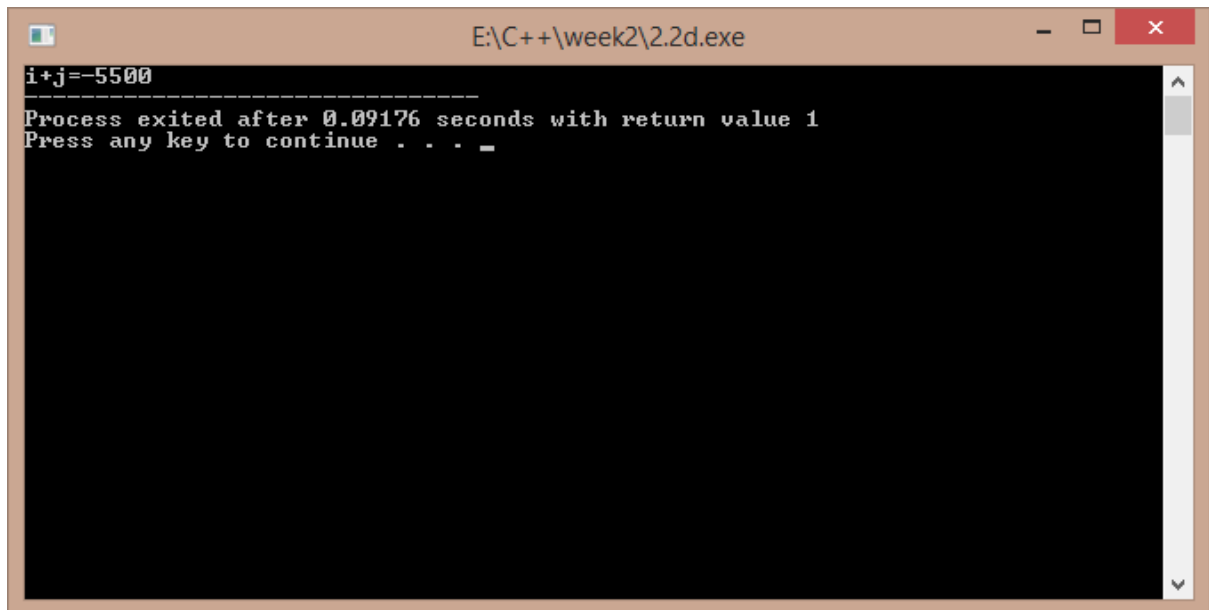
```
    cout<<"i+j="<<-(i+j);
```

```
return 1;
```

```
}
```

In 6<sup>th</sup> line insertion operator must be used , not the extraction operator ..





```
i+j=-5500
-----
Process exited after 0.09176 seconds with return value 1
Press any key to continue . . . _
```

2.3)

```
#include<iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int i=10,j=5;
```

```
    int modResult=0;
```

```
    int divResult=0;
```

```
    modResult=i%j;
```

```
    cout<<modResult<<" ";
```

```
    divResult=i/modResult;
```

```
    cout<<divResult;
```

```
    return 1;
```

```
}
```

This code will generate a compiler error because in tenth line I is being divided by zero ..