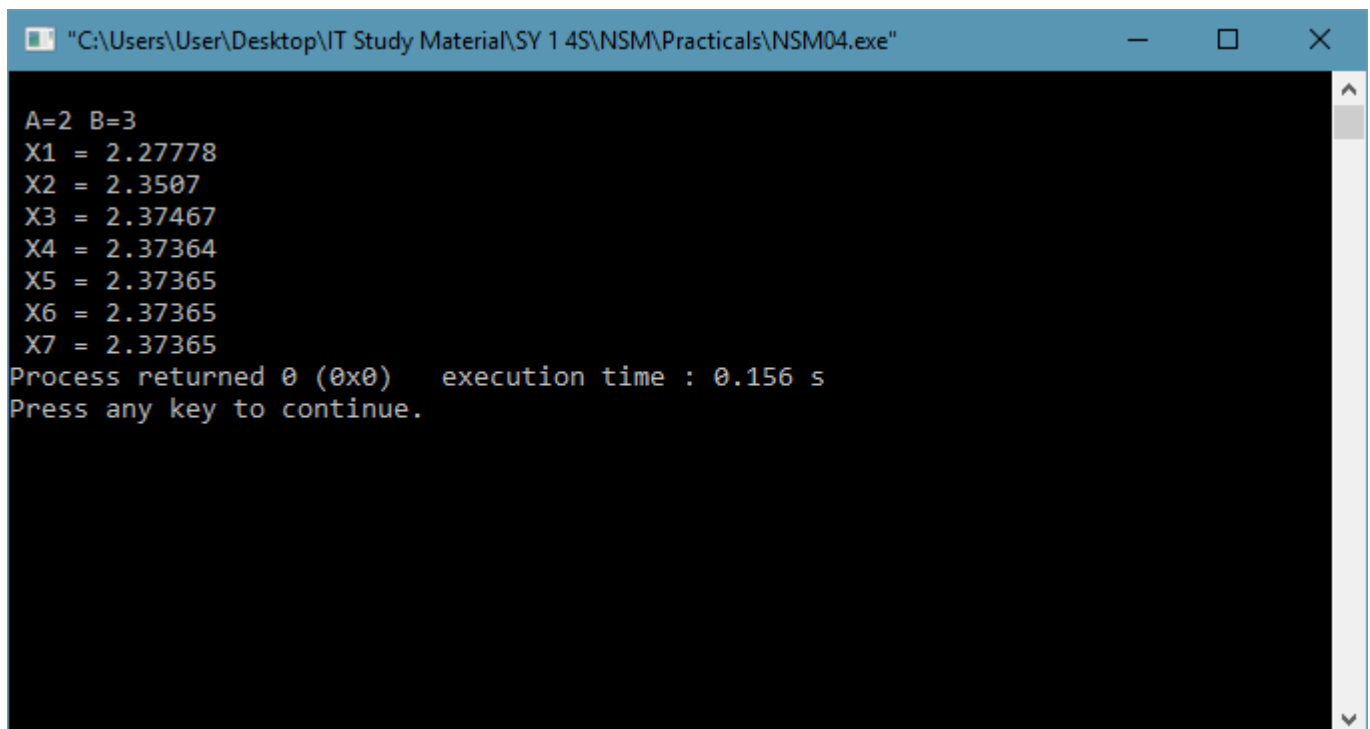


```

//program for secant's method
#include<iostream>                                //for cout & cin
#include<math.h>                                  //for trigonometric functions if any
using namespace std;
#define f(x) ( x*x*x-x-11 )                      //input function
void ab(double *a,double *b,double x)           //for finding interval
{
    while(1)
    {
        if(f(x)<0)
        {
            while(f(x)<0.0)
            {
                x++;
                *b=x--;
                *a=x;
                break;
            }
        }
        else
        {
            while(f(x)>0.0)
            {
                x++;
                *b=x--;
                *a=x;
                break;
            }
        }
    }
    cout<<"\n A="<<*a<<" B="<<*b;
}
void root(double *a,double *b,double x)         //for finding root
{
    double k;
    for(int i=0;i<15;i++)
    {
        k=x;
        x=(*b-(f(*b)*( *b-*a)/(f(*b)-f(*a))));
        *a=*b;
        *b=x;
        if(k==x)
            break;
    }
}

```

```
        cout<<"\n X"<<i+1<<" = "<<x;
    }
}
int main()
{
    double a,b,x=0.0;
    ab(&a,&b,x);
    root(&a,&b,x);
    return 0;
}
```



```
"C:\Users\User\Desktop\IT Study Material\SY 1 4S\NSM\Practicals\NSM04.exe"
A=2 B=3
X1 = 2.27778
X2 = 2.3507
X3 = 2.37467
X4 = 2.37364
X5 = 2.37365
X6 = 2.37365
X7 = 2.37365
Process returned 0 (0x0)   execution time : 0.156 s
Press any key to continue.
```