```cpp
//program for regula falsi method
#include<iostream>
using namespace std;
#include<math.h>
#define f(x) (x*x*x-x-11)
float x0,x1,xn,x=1;
void f1()
{    for(int i=0;i<10;i++)
     {    xn=(x0*f(x1)-x1*f(x0))/(f(x1)-f(x0));
          if(f(xn)<0.0)
               x0=xn;
          else
               x1=xn;
          cout<<"\n Step "<<i+1<<"\t Root = "<<xn;
     }
}
void f2()
{    for(int i=0;i<10;i++)
     {    xn=(x0*f(x1)-x1*f(x0))/(f(x1)-f(x0));
          if(f(xn)<0.0)
               x1=xn;
          else
               x0=xn;
          cout<<"\n Step "<<i+1<<"\t Root = "<<xn;
     }
}
int main()
{    if(f(x)<0.0)
     {    while(f(x)<0.0)
               x++;
          x1=x--;
          x0=x;
          cout<<" A = "<<x0<<" and B = "<<x1<<". ";
```

```
            f1();

      }

      else

      {     while(f(x)>0.0)

                 x++;

            x1=x--;

            x0=x;

            cout<<" A = "<<x0<<" and B = "<<x1<<". ";

            f2();

      }

      return 0;

}
```
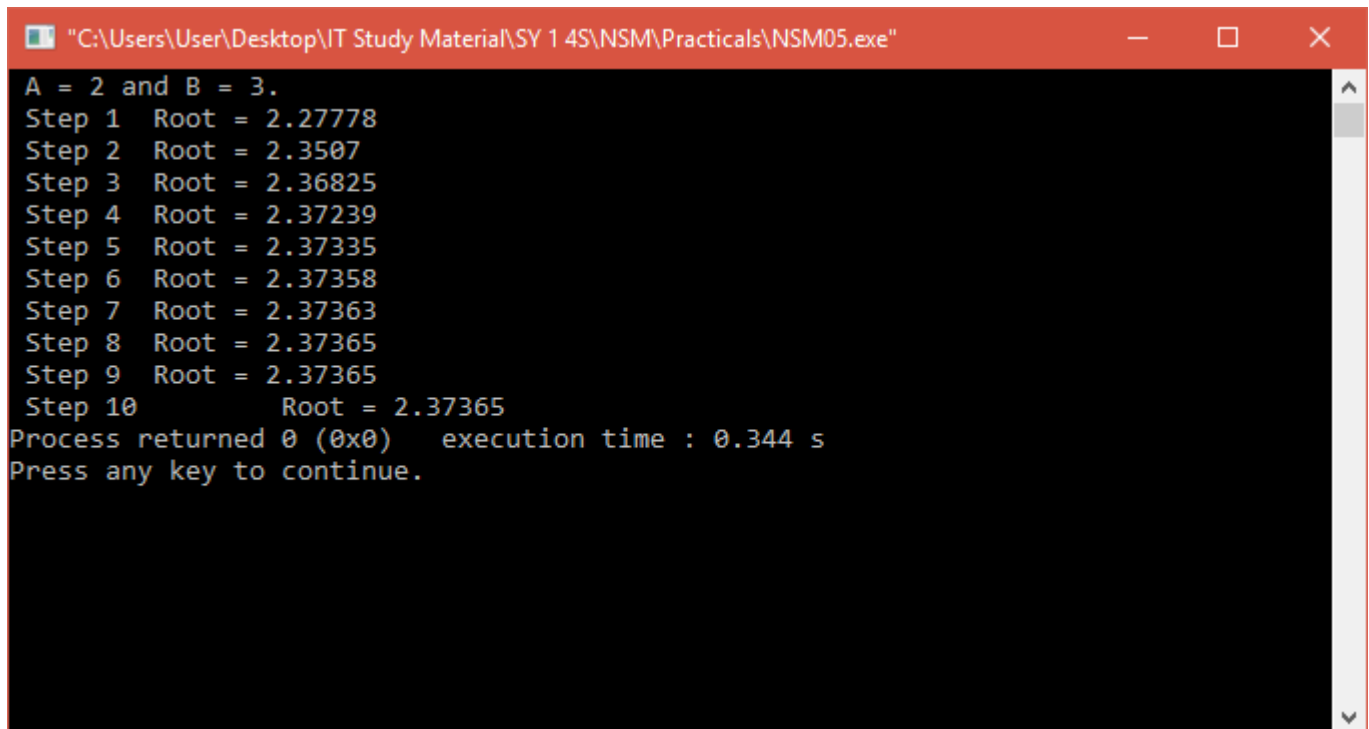
```
 A = 2 and B = 3.
Step 1  Root = 2.27778
Step 2  Root = 2.3507
Step 3  Root = 2.36825
Step 4  Root = 2.37239
Step 5  Root = 2.37335
Step 6  Root = 2.37358
Step 7  Root = 2.37363
Step 8  Root = 2.37365
Step 9  Root = 2.37365
Step 10        Root = 2.37365
Process returned 0 (0x0)   execution time : 0.344 s
Press any key to continue.
```