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//Program for Bisection method
#include<iostream>
#include<math.h>
using namespace std;
#define f(x) ((x*x*x)-x-11)
int main()
{     long double a,b,x0,x=0.0;
      if(f(x)<0.000000)
      {     while(1)
            {     if(f(x)>0.000000)
                  {     b=x--;
                        a=x;
                        break;
                  }
                  x++;
            }
            cout<<" A = "<<a<<" and B = "<<b;
            for(int i=0;i<15;i++)
            {     x0=((a+b)/2);
                  if(f(x0)<0.000000)
                        a=x0;
                  else
                        b=x0;
                  cout<<"\n Step = "<<i+1<<"\tRoot = "<<x0;
            }
      }
      else
      {     while(1)
            {     if(f(x)<0.000000)
                  {     a=x--;
                        b=x;
                        break;
                  }
```

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            x++;
        }
        cout<<" A = "<<a<<" and B = "<<b;
        for(int i=0;i<15;i++)
        {    x0=((a+b)/2);
            if(f(x0)<0.000000)
                a=x0;
            else
                b=x0;
            cout<<"\n Step "<<i+1<<" Root = "<<x0;
        }
    }
    return 0;
}
```