***PROGRAM OF ITERATION METHOD***

#include<stdio.h>

#include<conio.h>

#include<math.h>

#define f(x) (pow(x,3)-x-1.0)

#define g(x) (pow((x+1),1.0/3.0))

void main()

{

float x0,x1;

clrscr();

do

{

printf("\nEnter the guess interval.....\n");

scanf("%f %f",&x0,&x1);

if(f(x0)\*f(x1)<0)

break;

printf("\nGuess interval is wrong: Input again....");

}while(1);

do

{

x1=g(x0);

if(fabs(x1-x0)<0.0001)

break;

x0=x1;

}while(1);

printf("\nApprox root is= %4f",x1);

getch();

}

INPUT & OUTPUT

Enter the guess interval.....

0 1

Guess interval is wrong: Input again....

1 2

Approx root is= 1.3247