```
//simpson's 1/3
#include<iostream>
#include<math.h>
using namespace std;
float f(float x)
{
    return 1/(1+x*x);
}
int main()
{
    int i,n ;
    float x0,xn,h,sum;
    cout<<"enter no of intervals:";
    cin>>n;
    cout<<"enter x0 & xn:";
    cin>>x0>>xn;
    h=(xn-x0)/n;
    sum=f(x0)+(xn)+4*f(x0+h);
    for(i=3;i<=n-1;i+=2)
        sum+=4*f(x0+i*h)+2*f(x0+(i-1)*h);
        cout<<"integral value="<<(h/3)*sum;
        return 0;

}
```

enter no of intervals:5

enter x0 & xn:0 1

integral value=0.700765