

```
#include<stdio.h>
#include<conio.h>
float f(float x)
{
    return(1/(1+x));
}
void main()
{
    int i,n;
    float x0,xn,h,y[20],so,se,ans,x[20];
    printf("\n Enter values of x0,xn,h: ");
    scanf("%f%f%f",&x0,&xn,&h);
    n=(xn-x0)/h;
    if(n%2==1)
    {
        n=n+1;
    }
    h=(xn-x0)/n;
    printf("\n Refined value of n and h are:%d %f\n",n,h);
    printf("\n Y values: \n");
    for(i=0; i<=n; i++)
    {
        x[i]=x0+i*h;
        y[i]=f(x[i]);
        printf("\n %f\n",y[i]);
    }
    so=0;
```

```
se=0;
for(i=1; i<n; i++)
{
    if(i%2==1)
    {
        so=so+y[i];
    }
    else
    {
        se=se+y[i];
    }
}
ans=h/3*(y[0]+y[n]+4*so+2*se);
printf("\n Final integration is %f",ans);
getch();
}
```



```
Enter values of x0,xn,h: 1
3
1

Refined value of n and h are:2 1.000000

Y values:

0.500000
0.333333
0.250000

Final integration is 0.694444
```