

```

#include<stdio.h>
#include<math.h>
int main()
{
    float pi,a,c,h,sum,b;
    int n,i,r;
    float f(float x);
    pi=4*atan(1);
    a=pi/36;
    c=pi/9;
    n=13;
    h=(c-a)/n;
    sum=0;
    for(i=0;i<=n-1;i++)
    {
        sum=sum+(h/2.)*(f(a+i*h)+f(a+(i+1)*h));
    }
    printf("the value of the integral upto 5D places is = %7.5f ",sum);
    return(0);
}

float f(float x)
{
    float y,b;
    int r;
    r=0;
    b=0.1+(r/10.);
    y=(pow(x,3)+cos(b*x))/sqrt((pow(cos(x),4)+(b*pow(sin(x),4))));
    return(y);
}

```

\\output\\
the value of the integral upto 5D places is = 0.28039