clc;

f = inline('(x^2)/(y^2 + 1)');

x1 = input('Enter the value of X1 = ');

y1 = input('Enter the value of Y1 = ');

xn = input('Enter the value of Xn = ');

Acc = input('Enter the value of Accuracy = ');

while x1 < xn

yp = y1 + h\*f(x1,y1);

x2 = x1 + h;

yc = y1 + (h/2)\*(f(x1,y1)+f(x2,yp));

while abs(yc-yp)>Acc

yp = yc;

yc = y1 + (h/2)\*(f(x1,y1) + f(x2,yp));

end

x1 = x1+h;

y1 = yc

end;

fprintf('%f , %f\n ',x1,y1)

%OUTPUT

Enter the value of X1 = 0

Enter the value of Y1 = 0

Enter the value of Xn = 1

Enter the value of Accuracy = 0.001

y1 = 0.0078

y1 = 0.0468

y1 = 0.1468

y1 = 0.3285

1.000000 , 0.328472