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%Name - Shriman Zunjarrao Patil
% Roll No. - TYMEB209
% Batch - B4
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```
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 = ');
h = input('Enter the value of h = ');
```

```
while x1 < xn
    K1 = h*f(x1,y1);
    K2 = h*f(x1+(h/2),y1+(K1/2));
    K3 = h*f(x1+(h/2),y1+(K2/2));
    K4 = h*f((x1+h),(y1+K3));
    K = (K1 + 2*K2 + 2*K3 + K4)/6;
    y1 = y1 + K;
    x1 = x1 + h;
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 h = 0.25
1.000000, 0.322160
```