

%NAME: Sarthak Abhay Patil

%ROLL NO:TYMEB228

%BATCH:B4

f=inline('exp(x)\*cos(x)-1.2');

df=inline('exp(x)\*(cos(x)-sin(x))');

ddf=inline('(-2)\*exp(x)\*sin(x)');

x1=input('Enter initial value:');

acc=input('Enter the accuracy:');

while f(x1)\*ddf(x1)/df(x1)^2>1

    x1=input('Enter initial value again');

end

x2=x1-f(x1)/df(x1)

while abs(x2-x1)>acc

    x1=x2

    x2=x1-f(x1)/df(x1)

end

fprintf('Root of equation x2= %f',x2)