

# ASSIGNMENT

Emulation

clear

clc

clear all

format short g

X(1) = 0.5, I = 1, tol = 1e-21, maxI = 50, err(1) = 0;

for n

J = (exp(-0.02 \* X) \* (4 - 2)) - 2

Ipnew = diff(J)

for i = 2 : maxI,

X(i) = (X(i-1)) - ((subs(J, X(i-1))) / (diff(Ipnew, X(i-1))));

I = [I, I];

err(i) = abs(X(i) - X(i-1)) \* 100;

if err(i) < tol, break, end

end

table = [I' err']

disp table

1	0.5	0
2	0.8387	33.587
3	0.87496	4.6065
4	0.8851	0.07526
5	0.8851	1.97042e-05
6	0.8851	1.35462e-12
7	0.8851	0