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Civil Engineering
171ENG03101S

ENG382
Assignment

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1- Command Window
2 - clear
3 - clc
4 - close all
5 - format short g
6 - X(1)=0.5; K=1; tol=1E-2L; maxI=50; err(1)=0;
7 - symx
8 - g=(exp(-0.5*x)*(4-x))-2;
9 - gprime=diff(g)
10 - for K=2:max;
11 - X(K)=(X(K-1))-((subs(g,x(K-1)))/subs(gprime,x(K-1)));
12 - K=[K K]
13 - err(K)=abs(X(K)-X(K-1))
14 - If err(K)<=tol, break, end
15 - end
16 - table=[K' X' err']
```

1	0.5	0
2	0.83889	0.33889
3	0.88496	0.046065
4	0.88571	0.00007826
5	0.88571	1.9704e-07
6	0.88571	1.3845e-14
7	0.88571	0