

UWAZIE PRECIOUS N

171ENG011032

Chemical Engineering

ENG 382 LMS

Command Window

clear

clc

Spms x

format short g

f = exp(0.5+x) + (4-x) - 2j

fprime = diff(f)

x = 0.5j

for i = 1:10

itel(i+1) = i

y(i) = xj

xc = double(subs(xc - (f/fprime)))

x(i+1) = xj

eq(i+1) = abs((x(i+1) - x(i)) / x(i+1)) * 100

if eq(i+1) <= 1e-21

break

end

end

table = table(itel, x', eq')

table properties [variable names - [iteration number]
values of x', errors].

OUTPUT

table

Iter	values of x	Error
0	0.5	0
1	0.83889	40.397
2	0.88496	5.2054
3	0.88571	0.084972
4	0.88571	$2.2247e-0.5$
5	0.88571	$1.5293e-12$
6	0.88571	0