

Command Window

clear all

close all

clc

V = 0.5;

m = 3.5;

g = 9.8;

mg = m * g;

for i = 1 : 2000

 iter(i+1) = i

 V(i+1) = sqrt((mg + 0.02 * V(i)) * (500 + log10(V(i))^3)) / 0.3);

 Ea(i+1) = abs((V(i+1) - V(i)) / V(i+1)) * 10

 if Ea(i+1) <= 1 * 10^-11

 break

 endif

endfor

table = [iter' V' Ea']

display('The answer for V is:')

display(V(i+1))