NAME: AGWANIRU ROSEMARY

MATRIC N0: 17/ENG01/003

COURSE CODE: ENG 382

* commandwindow
* clear
* clc
* format short
* v=0.5;
* m=3.5;
* g=9.81;
* f=m\*g;
* v=sqrt(((((f+(0.02)\*v))\*(log(v))^3)+(10\*v)+17150)/0.3);
* for i=1:inf

 iter(i+1)=i;

 v(i+1)=sqrt(((((f+(0.02)\*v(i)))\*(log(v(i)))^3)+(10\*v(i))+17150)/0.3);

 cd(i+1)=abs(((v(i+1)-v(i))\*100));

 if cd(i+1)<=0.00000000001

 break

 end

* end
* table=table(iter',v',cd')

COMMAND WINDOW

table =

 20×3 table

 Var1 Var2 Var3

 \_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_

 0 239.05 0

 1 294.2 5514.9

 2 302.65 844.85

 3 303.89 124.7

 4 304.08 18.312

 5 304.1 2.6871

 6 304.11 0.39425

 7 304.11 0.057844

 8 304.11 0.0084868

 9 304.11 0.0012452

 10 304.11 0.00018269

 11 304.11 2.6804e-05

 12 304.11 3.9326e-06

 13 304.11 5.7699e-07

 14 304.11 8.4651e-08

 15 304.11 1.242e-08

 16 304.11 1.8247e-09

 17 304.11 2.6716e-10

 18 304.11 3.979e-11

 19 304.11 5.6843e-12