Tutorial No 01

Ques 11

a. d=input('distance=');

L=1;

r=0.001;

e=8.854\*(10^(-12));

c=(pi\*e\*L)./log((d-r)./r)

math

distance=[0.01:0.01:0.09]

c =

1.0e-10 \*

0.1266 0.0945 0.0826 0.0759 0.0715 0.0682 0.0657 0.0637 0.0620

b. d=input('distance=');

L=1;

r=0.001;

e=8.854\*(10^(-12));

c=(pi\*e\*L)./log((d-r)./r)

t=[d;c];

fid=fopen('capacity.table','w');

fprintf(fid,'cap\n');

fprintf(fid,'%5f %15.14f\n',t);

fclose(fid);

plot(d,c);

title('capacitance');

xlabel('d');

ylabel('c');

capacity

distance=[0.01:0.01:0.09]

c =

1.0e-10 \*

0.1266 0.0945 0.0826 0.0759 0.0715 0.0682 0.0657 0.0637 0.0620



Ques 12

a. L=input('length=');

g=9.81;

T=2.\*pi.\*sqrt(L./g);

fprintf('%5s %8f\n','T for(l=0.3)',T);

math

length=0.3

T for(l=0.3) 1.098768

b. simple pendulum

length peroid

0.100000 0.634374

0.200000 0.897140

0.300000 1.098768

0.400000 1.268748

0.500000 1.418503

0.600000 1.553893

0.700000 1.678396

0.800000 1.794281

0.900000 1.903122