clc;

clear all;

d=input('Enter diameter in cm:');

r=d/2;

rad=r\*10^(-2);

Da1a2=input('enter the value of Da1a2 distance between conductors a1 and a2 in m: ');

Da1b2=input('enter the value of Da1b2 distance between conductors a1 and b2 in m: ');

Da1c2=input('enter the value of Da1c2 distance between conductors a1 and c2 in m: ');

Da1b1=input('enter the value of Da1b1 distance between conductors a1 and b1 in m: ');

Da1c1=input('enter the value of Da1c1 distance between conductors a1 and c1 in m: ');

Db1b2=Dc1c2=Da1a2;

Da2b1=Dc1b2=Db1c2=Da1b2;

Da2c1=Da1c2;

Db1c1=Da2b2=Db2c2=Da1b1;

Da2c2=Da1c1;

DAB = (Da1b1 Da1b2Da2b1 Da2b2 )^1/4;

DBC = (Db1c1 Db1c2Db2c1 Db2c2 )^1/4;

DAC = (Da1c1 Da1c2Da2c1 Da2c2 )^1/4;

GMDL = (DABDBCDCA)^1/3;

DSA = (Dsb Da1a2)^1/2 ;

DSB = (Dsb Db1b2)^1/2 ;

DSC = (Dsb Dc1c2)^1/2;

Dsb = 0.7788\*r;

GMRL = (DSADSBDSC)^1/3;

L = 0.2\*10^-7\*log (GMD / GMRL);

DSA = (r\* Da1a2)^1/2 ;

DSB = (r\* Db1b2)^1/2 ;

DSC = (r\*Dc1c2)^1/2;

GMRC = (DSADSBDSC)^1/3;

C=2\*pi\*8.85\*10^-12/log(GMD/GMRC) ;

fprintf(‘\nValue of Inductance = %f mh/ph/km\n’,L);

fprintf(‘\nValue of Capacitance = %f microF/ph/km\n’,C);