n=input('enter no of equations n=');

for i=1:1:n

if i==1

a(i)=0;

b(i)=input('enter B matrix element=');

c(i)=input('enter C matrix element=');

else

if i==n

a(i)=input('enter A matrix element=');

b(i)=input('enter B matrix element=');

c(i)=0;

else

a(i)=input('enter A matrix element=');

b(i)=input('enter B matrix element=');

c(i)=input('enter C matrix element=');

end

end

d(i)=input('enter D matrix element=');

end

for i=2:1:n

m(i)=a(i)/b(i-1);

b(i)=b(i)-m(i)\*c(i-1);

d(i)=d(i)-m(i)\*d(i-1);

end

x(n)=d(n)/b(n)

for i=n-1:-1:1

x(i)=(d(i)-c(i)\*x(i+1))/b(i);

end

for i=1:1:n

fprintf('\nX(%d)=%f',i,x(i));

end

% OUTPUT

% TDMA

% enter no of equations n=4

% enter B matrix element=2.04

% enter C matrix element=-1

% enter D matrix element=40.8

% enter A matrix element=-1

% enter B matrix element=2.04

% enter C matrix element=-1

% enter D matrix element=0.8

% enter A matrix element=-1

% enter B matrix element=2.04

% enter C matrix element=-1

% enter D matrix element=0.8

% enter A matrix element=-1

% enter B matrix element=2.04

% enter D matrix element=200.8

%

% x =

%

%

%

%

31.6887

23.8450

% X(1)=65.969834

% X(2)=93.778462

% X(3)=124.538228

% X(4)=159.479524>>