```
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   16.1550  159.4795
%
%
% X(1)=65.969834
% X(2)=93.778462
% X(3)=124.538228
% X(4)=159.479524>>
```