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function x = fwdsub(A)

% HW 1 Problem 1(c) & (d)
% Function that does forward sub. for lower triang. matrix

% The input matrix A is a lower triangular matrix

% This function performs forward substitution on an lower triangular matrix
% that has been modified by concatenating the RHS of the system.

n = size(A,1);           %number of unknowns in the system
x = zeros(n,1);          %space in which to store our solution vector
x(1) = A(1,n+1)/A(1,1);  %finalized solution for last variable, resulting from lower triangular conversion

for ir1 = 2 : 1 : n
    x(ir1) = A(ir1,n+1);    %assume we're only dealing with a single right-hand side here.
    fact = A(ir1,ir1);      %diagonal element to be divided through doing subs for the ir2 row
    for ic = ir1-1:-1:1
        x(ir1) = x(ir1)-A(ir1,ic)*x(ic);
    end %for
    x(ir1) = x(ir1)/fact;    %divide once at the end to minimize number of ops
end %for

end %function

```

Not enough input arguments.

Error in fwdsub (line 12)

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n = size(A,1);           %number of unknowns in the system

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