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```
function [Vout] = circuitC(Vin, h, R2, R4, C1, C3)
```

## Set up and constants

```
%constants
steps = length(Vin);

% initialize variables
Vc1 = zeros(1, steps);
Vc3 = zeros(1, steps);
i1 = zeros(1, steps);
i2 = zeros(1, steps);
i3 = zeros(1, steps);
V1 = zeros(1, steps);
Vout = zeros(1, steps);

% A matrix
A = [1, -1, -1, 0, 0, 0;
     0, R2, 0, 0, -1, 0;
     0, 0, R4, 0, 0, -1;
     0, 0, 0, 1, 0, 0;
     0, 0, 0, 1, -1, 0;
     0, 0, 0, 0, 1, -1];

for i = 1:steps %compute model for circuit C
    b = [0;
         0;
         0;
         Vin(i);
         Vc1(i);
         Vc3(i)];

    x = linsolve(A, b);
    i1(i) = x(1);
    i2(i) = x(2);
    i3(i) = x(3);
    V1(i) = x(5);
    Vout(i) = x(6);

    Vc1(i+1) = Vc1(i) + (h/C1)*(i1(i));
    Vc3(i+1) = Vc3(i) + (h/C3)*(i3(i));
end

Not enough input arguments.

Error in circuitC (line 4)
steps = length(Vin);

end
```

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