

```
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%ECE301
clc;
clear all;
x1 = input('Input the first array which will remain constant (proper syntax please): ');
x2 = input('Input the second array which will be "flipped and shifted" (proper syntax please): ');
x1l=length(x1);
x2l=length(x2);
X1=[x1,zeros(1,x2l)];
X2=[x2,zeros(1,x1l)];
Y=1:length(x1);
for i=1:x1l+x2l-1
    y(i)=0;
    for j=1:x1l
        if(i-j+1>0)
            y(i)=y(i)+X1(j)*X2(i-j+1);
        else
            end
        end
    end
end
fprintf('The resulting convolved values are as follows')
y
% Matlab's built in "conv" (or conv2 which appears to be the proprietary function) works very similarly to the code presented here.
% It works so similarly, that both functions fail in the regard that there is no consideration of positioning along the n axis.
% The two arrays are convolved assuming that they start at n=1, and they do not account for any shifts along the axis.
```