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% EC 1306 mini project By
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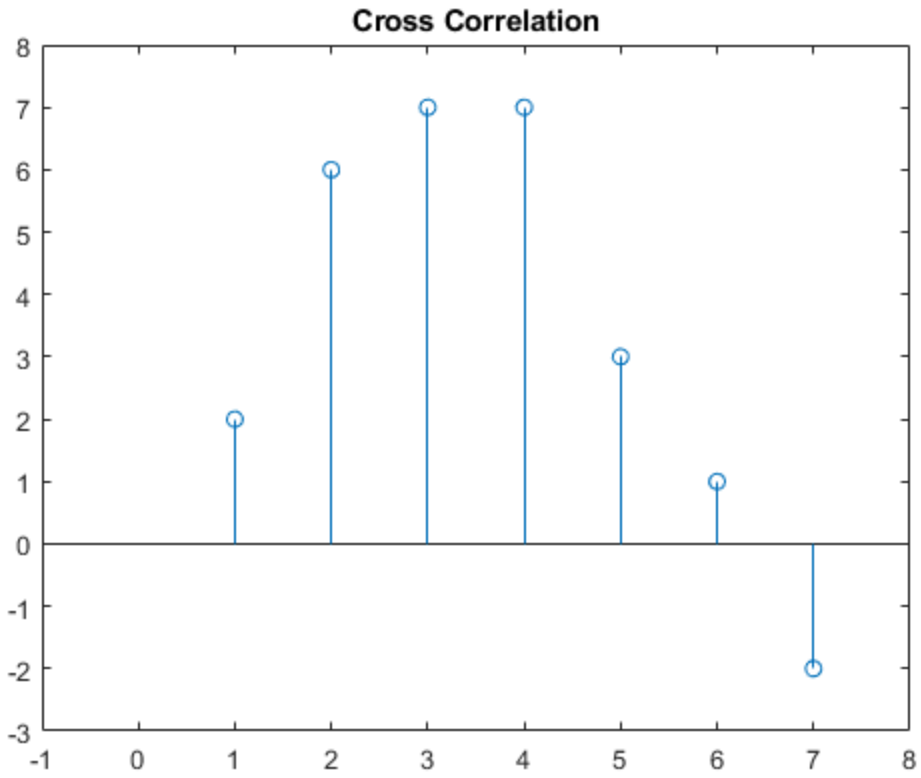
%
% Topic:-
% Determine the cross correlation between two sequences x= {1,2,1,2}
 and h = {2,2,1, -1} using
% direct computation method. Also write down the MATLAB program
 (without using cross
% correlation command) to determine the cross correlation of the above
 sequences and then verify
% MATLAB result with direct computation method result.
%
% Code
clc;
X1 = [1,2,1,2];
X2 = [2,2,1,-1];
k = length(X1)+length(X2)-1;
cross = zeros(1,k);
X1 = [ X1, zeros(1,k-length(X1))];
X2 = [ X2, zeros(1,k-length(X2))];

for i=1:1:k
    y = 0;
    for j=1:1:i
        y = y + (X2(i-j+1)*X1(j));
    end
    cross(i) = y;
end
disp("Cross Correlation will be ");
disp(cross);
stem(cross);
xlim([-1 k+1]);
ylim([min(cross)-1 max(cross)+1])
title("Cross Correlation")

%End of Code
```

```
Cross Correlation will be
     2     6     7     7     3     1    -2
```



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