```
function [M] = myLinConvMat(h,n)
\mbox{\ensuremath{\mbox{\$}}} This function computes the convolution matrix \mbox{\ensuremath{\mbox{\$}}} for impulse response
% with 'n' being the length of the input sequence 'x'
% 19ucc023
% Mohit Akhouri
rows = n; % initializing the number of rows of Convolution matrix M
length_h = length(h); % declaring the length of 'h'
columns = length(h) + n - 1; % declaring the number of columns of
M = zeros(rows, columns); % initializing the convolution matrix with
zeros
% generating the convolution matrix (ALGORITHM)
for i=1:rows
    offset = i; % offset in the matrix from where 'h' needs to be
 stored
    for j=1:length_h
        M(i,offset) = h(j);
        offset = offset + 1; % offset incremented
    end
end
disp(M);
end
```

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