
```
%circular covolution using concentric circle method
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```
clc;
close all;
clear all;
x=[2 1 2 1];
x=x(:,end:-1:1);
disp("reversed x");
disp(x);
h=[1 2 3 4];
for i=1:length(x);
    x=[x(end) x(1:end-1)];
    y(i)=sum(x.*h);
end
disp("convol product y:");
disp(y);
subplot(1,2,1);
stem(h,y);
xlabel("amplitude");
ylabel("index");
title("concentric circle method");
```

```
%using matrix method
```

```
xn=[2 1 2 1];
hn=[1 2 3 4];
h1=[];
hn=hn(:,end:-1:1);
for i=1:length(hn);
    hn=[hn(end) hn(1:end-1)];
    h1=[h1;hn];
end
y1=h1*xn';
disp("convolution product y:");
disp(y1);
subplot(1,2,2);
stem(hn,y1);
xlabel("amplitude");
ylabel("index");
title("matrix method");
```

reversed x

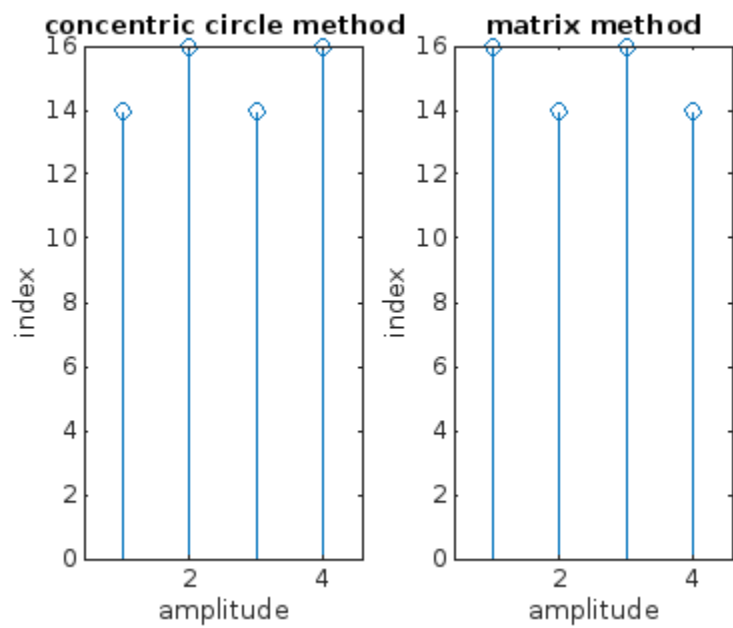
1 2 1 2

convol product y:

14 16 14 16

convolution product y:

14
16
14
16



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