PROGRAM :

```
close()
clear()
x=input('enter the first sequence');
g=input('enter the second sequence');
a=length(x);
b=length(g);
N=max(a,b);
y=cconv(x,g,N);
disp(y);
subplot(2,2,1);
stem(x);
xlabel('n');
ylabel('x(n)');
title('first sequence');
subplot(2,2,2);
stem(g);
xlabel('n');
ylabel('g(n)');
title('second sequence');
subplot(2,2,3);
stem(y);
xlabel('n');
ylabel('y(n)');
title('circular convolution with function');
c=a-b;
if(c<0)
    x=[x,zeros(1,-c)];
else
    g=[g,zeros(1,c)];
end
for n=1:N
    z(n)=0;
    for m=1:N
        q=n-m+1;
        if(q<=0)
            q=q+N;
        end
    z(n)=z(n)+(x(m)*g(q));
    end
end
subplot(2,2,4);
stem(z);
xlabel('n');
ylabel('y(n)');
title('circular convolution without function');
```

OUTPUT :

```
>> DSPEXP3
enter the first sequence
[1,1,0,0]
enter the second sequence
[2,0,2,0]
        2       2       2       2
```

first sequence

x(n) vs n

second sequence

g(n) vs n

circular convolution with function

y(n) vs n

circular convolution without function

y(n) vs n