```
h = [-1 0 1 0 -1 1]; %samples
NHL = -0.2; %linker Rand
NHR = 0.3; %rechter Rand
IH = 6; % breite
nh = [-2 -1 0 1 2 3]; %indexachse
th = [-0.2 -0.1 0.0 0.1 0.2 0.3]; %zeitachse


x = [1 -1 0 2 2 0 -1 1]; %samples
NXL = -0.1; %linker Rand
NXR = 0.6; %rechter Rand
IX = 7; % breite
nx = [-1 0 1 2 3 4 5 6]; %indexachse
tx = [-0.1 0.0 0.1 0.2 0.3 0.4 0.5 0.6]; %zeitachse


y = []; %samples
NYL = -0.3; %linker Rand
NYR = 1.2; %rechter Rand
IY = 16; % breite
ny = []; %indexachse
ty = []; %zeitachse

fs = 22050;%Abtastfrequenz
T = 1/fs; %Abtastabstand 1/fs

%zeitachse Start
ty(1) = NYL;
ty(IY) = NYR;
schritt = (abs(NYL)+abs(NYR)) / (IY-1);

for i=2:1:(IY-1)
    ty(i) = NYL + ((i-1)*schritt);
end
%zeitachse Ende


%indexachse Start
for i=1:1:IY
    ny(i) = ty(i)/schritt;
end
%indexachse Ende


z2=1;
for j=ny(1):1:ny(1)+IY-1
    z1 = 1; % Zähler
    eintrag = 0;

    for i=nh(1):1:nh(1)+IH
        h_ind = find(nh == i);
        temp = j-i;
        temp = round(temp)
        x_ind = find(nx == temp);
        if isempty(h_ind)
        E(z1) = 0;
        elseif isempty(x_ind)
        E(z1) = 0;
        else

        E(z1) = h(h_ind) * x(x_ind);

        end
        eintrag = eintrag+E(z1);
        z1 = z1+1;
    end

    y(z2) = eintrag;
```

```
    z2=z2+1;
end


subplot(3,1,1)
stem(nx,x)
axis([-4,12,-3,4])
subplot(3,1,2)
stem(nh,h)
axis([-4,12,-3,4])
subplot(3,1,3)
stem(ny,y)
axis([-4,12,-3,4])

figure
subplot(3,1,1)
stem(tx,x)
axis([-0.6,1.2,-3,3])
subplot(3,1,2)
stem(th,h)
axis([-0.6,1.2,-3,3])
subplot(3,1,3)
stem(ty,y)
axis([-0.6,1.2,-3,3])
```