N=100;

n = -N:N;

x = 1\*(n==0);

figure, stem(n,x);

y = zeros(size(x));

for k = 1:N

if k == 1

y(k)=1\*x(k);

else

if k == 4

y(k)= 1\*x(k)+(0.35)\*x(k-3);

else

if k == 5

y(k)= 1\*x(k)+(0.35)\*x(k-3)+(-0.2)\*x(k-4);

else

if k==6

y(k)= 1\*x(k)+(0.35)\*x(k-3)+(-0.2)\*x(k-4)+(-0.1)\*x(k-5);

else

if k==7

y(k)= 1\*x(k)+(0.35)\*x(k-3)+(-0.2)\*x(k-4)+(-0.1)\*x(k-5)+(-0.05)\*x(k-6);

end

end

end

end

end

end

stem(n,y)