%case 2

% H(z) =

% 1 + sqrt(2)z^(-1) + z^(-2)

% A \* ----------------------------

% 1 + a(1)z^(-1) + a(2)z^(-2)

b1 = 1;

b2 = -(sqrt(2));

b3 = 1;

a1 = -sqrt(2);

a2 = 1;

A = 0.5; %|a1| < sqrt(2) and |a2| < 1

numd1 = [b1 b2 b3];

dend1 = [1 a1 a2];

[f1,H1]=freqzdB(numd1,dend1,501,0,0.5);

figure(3);

plot(f1,H1)

hold on;

grid on;

title('Frequency response from f = 0 to 0.5 for IIR Digital Notch Filter')

figure(4);

zplane(numd1,dend1)

title('Pole-zero plot IIR Digital Notch Filter')

grid on;

hold on;