Demo for Q1

```
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x = [3 \ 4 \ 5 \ 5 \ 7 \ 6 \ 4 \ 2];
lv1 = 3;
w = FHaar(x, lvl);
figure(1)
subplot(411)
stem(w{4})
subplot(412)
stem(w{3})
subplot(413)
stem(w{2})
subplot(414)
stem(w{1})
 i = IHaar(w, 3, 8);
figure(2)
stem(i)
plot(abs(i-x))
title('Error Signal')
\mbox{\%} We can see from the error calculation and the plot, perfect
 % reconstruction is achieved
```





