MATH 464, HW 8

1) Implement in Matlab 1-dimensional full Discrete Haar Transform. Apply it to the following vectors: $v_1(k) = \sin(2\pi k/64)$, $k = 0, \ldots, 63$, $v_2(k) = \sin(4\pi k/64)$, $k = 0, \ldots, 63$, $v_3(k) = \cos(2\pi k/64)$, $k = 0, \ldots, 63$. Perform compression by tresholding these coefficients which are smaller than 0.1 times the magnitutde of the largest coefficient in the Haar representation. Compute the inverse Haar transforms of these compressed signals and compare to the originals.