1. Write a matlab script of the form:

   ```matlab
   function [y] = hoApp(A,bet,x)
   ```

   that will computes the $Q^T x$ where $Q$ is the $Q$-matrix of the Householder QR obtained for a certain matrix. The matrix $A$ and the vector $\text{bet}$ store the results obtained from applying the script $\text{hoQR}$ as discussed in class (see also HW4). [Hint: Note that $Q = P_1 P_2 \cdots P_n$ so $Q^T$ applies the $P_i$ in the order ...(?)]

2. Show how you can use $\text{hoApp}$ to solve a Least-squares problem with Householder QR.