

Documentation of the MATLAB function `hhrv.m`

The function's arguments and returned quantities are listed in the help section of the function which is reproduced below.

```
function [L,C]=hhrv(F)
% forms reflection vector L of householder transformation that maps F to [C;zeros]
```

Given the column vector F , supplied in `F`, the column vector L , of the same length as F and returned in `L`, is formed so that the column vector

$$A = (I - 2LL')F = F - 2L(L'F)$$

has first (scalar) element C , returned in `C`, with all other elements zero.

L has norm 1, i.e. $L'L = 1$, and $(I - 2LL')$ is an (orthonormal) reflection.