```
k = [6 7 8];
display('with QR');
for i = 1 : 3
    A = [1 1; 10^(-k(i)) 0; 0 10^(-k(i))];
    b = [-10^(-k(i)); 1+10^(-k(i)); 1-10^(-k(i))];
    x = A\b
end

display('without QR');

for i = 1 : 3
    A = [1 1; 10^(-k(i)) 0; 0 10^(-k(i))];
    b = [-10^(-k(i)); 1+10^(-k(i)); 1-10^(-k(i))];
    x = (A'*A)\(A'*b)
end
```

```
with QR

x =

    1.0000
   -1.0000


x =

    1.0000
   -1.0000


x =

    1.0000
   -1.0000

without QR

x =

    0.9999
   -0.9999


x =

    1.0120
   -1.0120

Warning: Matrix is singular to working precision.

x =
```

```
   Inf
  -Inf
```

Published with MATLAB® R2015b