```
%% Quiz 4 - Quadratic Programming
%% example done together

H = [1 -1;
    -1 2];
f = [-1; -1];
A = [1 1;
    -2 -3];
b = [3; 6];
lb = [0; 0];

x = quadprog(H, f, A, b, [], [], lb, [])
```

```
Minimum found that satisfies the constraints.

Optimization completed because the objective function is non-decreasing in
feasible directions, to within the value of the optimality tolerance,
and constraints are satisfied to within the value of the constraint tolerance.

<stopping criteria details>
x = 2×1
    1.8000
    1.2000
```

```
%% problem to work on alone
H = [.4 .1 .04;
    .1 .16 .06;
    .04 .06 .36];
f = [0; 0; 0];
A = -1*[.14 .11 .1];
Aeq = [1 1 1];
b = [-120];
beq = [1000];
lb = [0; 0; 0];

x = quadprog(H, [], A, b, Aeq, beq, lb, [])
```

```
Minimum found that satisfies the constraints.

Optimization completed because the objective function is non-decreasing in
feasible directions, to within the value of the optimality tolerance,
and constraints are satisfied to within the value of the constraint tolerance.

<stopping criteria details>
x = 3×1
  380.9524
  476.1905
  142.8571
```