```
% plot surface for HW problem 1a)
B = [2 1; 1 3];
c = [1;1];

% creates grid on the range [-5,5] x [-5,5] over which to plot surface
[x,y] = meshgrid(-5:0.25:5);

% create surface
f = zeros(size(x));
for i = 1:numel(x)
    z = [x(i);y(i)];
    f(i) = 0.5*z'*B*z + c'*z;
end

% plot surface
surf(x,y,f)

% make labels for graph
xlabel('x_0','Fontsize',14,'FontName','cmr10')
ylabel('x_1','Fontsize',14,'FontName','cmr10')
zlabel('f','Fontsize',14,'FontName','cmr10')
set(get(gca,'ZLabel'),'Rotation',0)
set(gcf,'color','w');   % makes background white
```