

```

function Vout = the_plot(heights)
    Vin = 12;
    w = 0.5;
    htot = 1;
    c = 8.854 * 1e-12;
    Cknown = c * htot;
    Vout = zeros(size(heights));
    for i = 1:length(heights);
        height = heights(i);
        Ctank = c * (htot + 80 * height);
        Vout(i) = 2 * Vin * (Ctank * Cknown)/(Ctank + Cknown)^2;
    end
    plot(heights, Vout)
    xlabel('Heights of Water')
    ylabel('Vout')
end

```

