```matlab
function [y1,y2,y3,y4,y5,y6,y7] = volt2deg(v1,v2,v3,v4,v5,e6,e7)
%#codegen

%Enter Calibration Voltages
joint1_zero=8.4936;
joint1_25=9.2939;
joint2=4.3645;
joint3_extended=8.7874;
joint3_retracted=0.3687;
joint4=8.8664;
joint5=5.5666;
%---------------------------------------------
slope1245=(joint1_25 - joint1_zero)/25;
slope3=(joint3_extended - joint3_retracted)/597;

joint1_os=joint1_zero;
joint2_os=joint2 + (slope1245 * 5.6932);
joint4_os=joint4;
joint5_os=joint5;

y1=(joint1_os - v1)./slope1245;
y2=(joint2_os - v2)./slope1245;
y3=(v3 - 1.9593)./slope3;
y4=(v4 - joint4_os)./slope1245;
y5=(v5 - joint5_os)./slope1245;
y6=(pi/180)*(30/18750).*e6;
y7=(pi/180)*(30/33920).*e7;
```