



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Davit Javadian	Project Number J1306
Project Title How to Create Tens of Thousands of Colors Using a C Program	
Abstract Objectives/Goals I hypothesize that by using a C program to increase or decrease the intensity of each one of the red, green, and blue LEDs and mixing the three colors, I can create tens of thousands of different colors. Methods/Materials Select a color from the Color Gamut. Then edit the C program to generate the color. Save the file and compile the C program. Program the PSoC chip. Place a color mixing chamber on top of the LEDs. Then run the program in the Demo Board. Repeat this process 6 times. Results It was found that in a C Program by varying the intensity of the red, green and blue LEDs one can produce tens of thousands of various colors in the color mixing chamber. The C program mixed proper amounts of each one of the three colors.	
Summary Statement Create different colors by changing and combining intensities of red, green, and blue LEDs using a C program.	
Help Received My father helped me with debugging the C program.	