

# CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

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**Project Number** 

**S1313** 

**Project Title** 

29728284988146 (Base 97)

## **Abstract**

## **Objectives/Goals**

The purpose of our project this year was to create a cipher based on a numerical system where all values corresponded with a printable character.

#### Methods/Materials

Our first step was to figure out what system we wanted to employ. When we looked at the ASCII table to see all of the characters we wanted to encode, we realized that the only system that would work was base-97. We decided that Flash Actionscript would be ideal to create a graphical user interface. We proceeded to learn Actionscript as quickly as possible, and wrote our program.

#### Results

In the creation of this project we met our goal of not only expanding our original program to include any character, but in simplifying the interface to make it easier to use.

### **Conclusions/Discussion**

Unlike last year, we feel that we have designed and built a finished product that is a fitting end to two years of work. Though we did deviate slightly from our original goals, our base 97 encoder/decoder accomplishes everything that we intend it to accomplish quickly and accurately.

## **Summary Statement**

Our project is about a program that encodes and decodes using a cipher based on a base-97 system.

## Help Received

Keith Maxwell, our school's technical advisor, helped us write the code for our program