# CAN-Opener – How to Use

This program can read and interpret data from a car from 1996 and onwards, using the On-Board-Diagnostics-II standard with an ELM327 adapter (available off of Amazon for comparatively little money). There are multiple ways to use this program.

1. Capture data from a car and store it as CSV
   a. If you are beta testing, an emulated version of the ELM327 reader will be running. **Select port CNCB0!**
   b. Choose a duration to collect data.
   c. Select a valid file name ending in ".csv". The program should not accept invalid file names.
   d. Let the program run and collect data!
2. Read in data collected using Function 1 and convert it to a human-readable format using an industry-standard DBC lookup table file. **NOTE: The lookup table file location is currently hardcoded, and everything is loaded automatically.**
   a. Select a file to read from. The program should keep re-prompting if a nonexistent file or an invalid entry is provided.
   b. Enter a valid file name ending in ".csv" to store the human-readable data. Again, the program should not accept invalid file names!
   c. Let the program run and convert the data into a human-readable format!
3. Interpret OBD2 response frames directly.
   a. This function is hard to beta test as it requires knowledge of the ELM327 and OBD2. What can be done, however, is data validation checking (by basically entering garbage into the prompt).

**After running the program, you can open the project folder in order to see the results! This includes the raw hex data frames and the decoded data.**