Final Project Proposal: A Port of IRVINE32 for 64bit NASM

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**Project Proposal <Updated>:**

We are planning on writing a port of some of the functions from the Irvine32 library to 64bit NASM assembly code. We’ve come across some libraries ([irvine-32 NASM](https://github.com/kubistika/irvine32-nasm) and Along32) in GitHub, which have irvine32 library ported into 32-bit NASM for Linux. Initially, we wanted to port these functions to both macOS and Windows - to allow cross platform functionality, however, as we had some trouble using the gdb (debugger) in Windows, we’re only working on the functions for 64-bit NASM on macOS. We’re translating the 32-bit code into 64-bit and interacting with the lldb (macOS debugger) to understand and solve the issues that we’re having in the process. There are challenges that we’re anticipating because we have so much more to learn about NASM before figuring out how to solve each error or fault. As we’re translating a few codes and creating alternatives for some, it is hard to estimate the level of challenge facing us.