

## Report

Our Assumptions and findings are, our program will start from the file `first_stage.asm`, we will clear the screen then print a greeting message (1st Stage Loader) to indicate that we have entered the first stage, each time we print on screen a string we will invoke a `bios_print` to display the message . We then try to detect if we booted successfully from a floppy or a boot drive in our case we booted from a floppy. Then we read the disk sectors in the floppy in stage two and three. We then try and load a message indicating that `second_stage.asm` was loaded successfully (2nd Stage loaded, press any key to resume!) and wait for a user typed input on the keyboard to jump to `second_stage.asm`. In `second_stage.asm` we do the same as `first_stage.asm` we clear the screen and print a greeting message (MyOS@AUC Greeting CSCE-231 ) indicating that we entered stage two. Then we will check if the a20 gate and long mode is supported if at any point one of them is shown to be not supported by the CPU the program halts and prints a message to indicate that, in our case we found that both were supported. Then we print our scanned memory. We have all contributed in all the files.