

## OS Assignment 5

### Question 1

In this assignment, we implemented a simple bootloader, which would be booted via a legacy BIOS. The program switches to 32-bit mode and then prints 'Hello World' and the contents of CR0 (which switches us to protected mode).

A bootable binary is created which basically represents the boot sector of a disk and is recognized by the BIOS as a bootable image. We boot this using qemu.

#### **Instructions to boot image:**

Use the following commands:

- 1. `nasm -o bootloader_2019035.bin bootloader_2019035.asm` (for compilation)*
- 2. `qemu-system-x86_64 bootloader_2019035.bin`*