## OS Assignment-5: Modified philosophers problem

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Q1:

In the first part we use QEMU emulator to simulate the hardware of x86 As we know in the bootup process , the system first boots to 16 bit mode, Here we use the help of bios interrupt 0x10 to print hello world directly to display. Later we shift to protected mode using our cr0 register and print its value to do that we have to set segment registers and GDT for 32 bit mode.

Q2:

Advisory file locks are stup in this q to enable the warning sign if multiple fles are tried to be edited at the same time.

The text editor saves on s exits on e quits without saving on q and deletes the file on d

## References:

https://medium.com/@g33konaut/writing-an-x86-hello-world-boot-loader-with-assembly-3e4c5bdd96cf

https://dev.to/frosnerd/writing-my-own-boot-loader-3mld

Implemented as Assignment 5 in CSE231 - Operating Systems at IIIT Delhi