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CS460 LAB1 Check List

1. Does it boot up the MTX OS? **yes**

2 For those who can't demo the complete LAB1:

2-1. Show LAB1.1: can boot up and gets()/prints()\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2-2. Show LAB1.2: can display the file names under / directory?\_\_\_\_\_\_\_\_\_\_\_\_

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CS460 LAB#1 QUESTIONS

1. On Intel x86 based PCs,druing booting, what does BIOS do?

**It initializes itself then checks memory and other devices.**

How many sectors does BIOS load from the boot device?

**For a floppy disk there is only 1 boot sector.**

Where in memory does BIOS load the booter?\_

**0x1000**

2. BIOS loads only 512 bytes of a booter into memory, which is only the

beginning part of the booter. How does the booter load the remaining part of the booter into memory?

**It will load whatever is next for the booter until it the full booter is loaded.**

3. Assume a COMPLETE booter is loaded at the segment 0x9000. WHY do we have to set the CPU's sgement registers CS,DS,SS,ES to 0x9000?

**It is because segment 0x9000 is where the booter is loaded. SO we should also set these register segments to the same address.**

4. How do you find the file /boot/mtx?

**Use GD(group descriptor) to find the root and I used getblk. Then we use a for loop into these direct blocks and then load the root directory’s block into memory. Keep looping until we got the mtx inode number.**

5. How to load the (disk) blocks of /boot/mtx to the segment 0x1000?

**Use getblk with 0 to load the data block to 0x1000.**