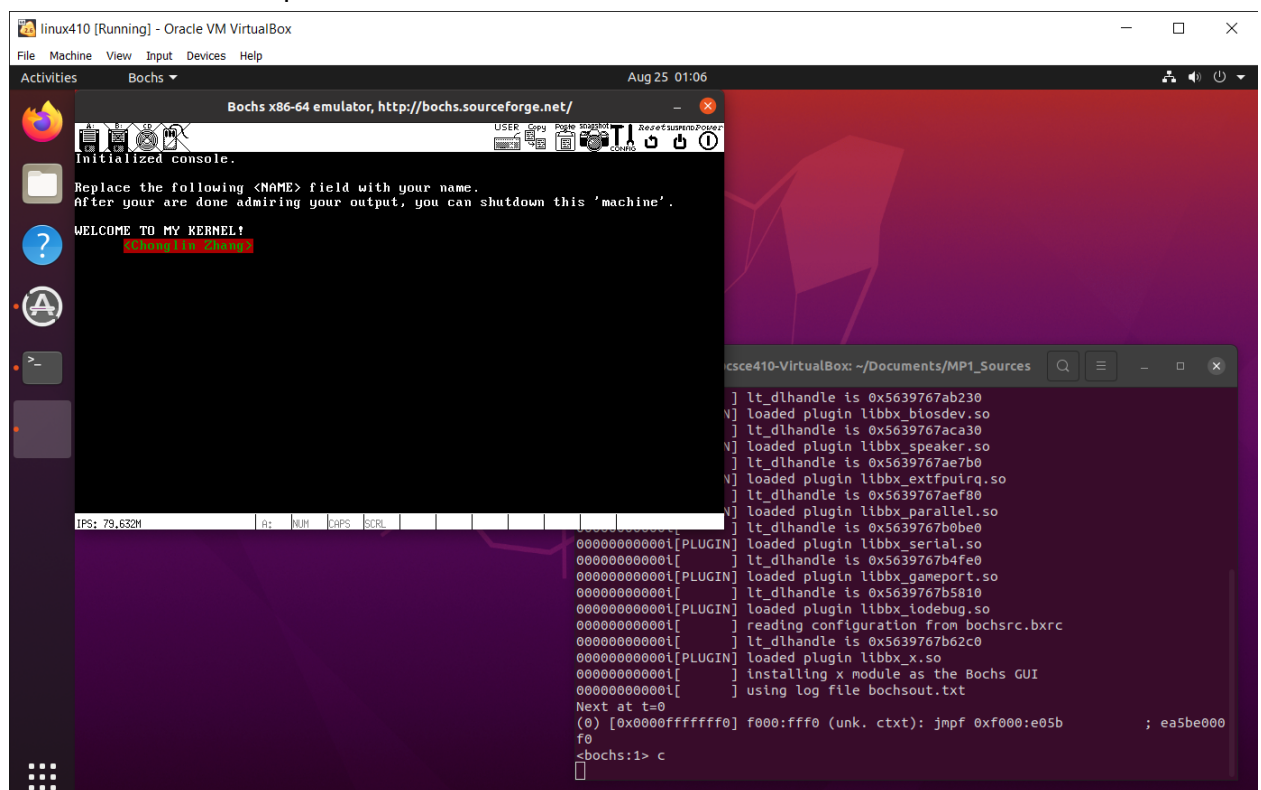Chonglin Zhang
CSCE 611
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How to do:

1. Get into the MP1_sources directory and edit the kernel.C
2. Compiling source code by using 'make', and it will generate the kernel.bin file
3. After all source codes compile, we need to copy the kernel.bin onto the image by running the ./copykernel.sh
4. Starting with bochs and passing the configuration file by using 'echo c | bochs -f bochsrc.bxrc'
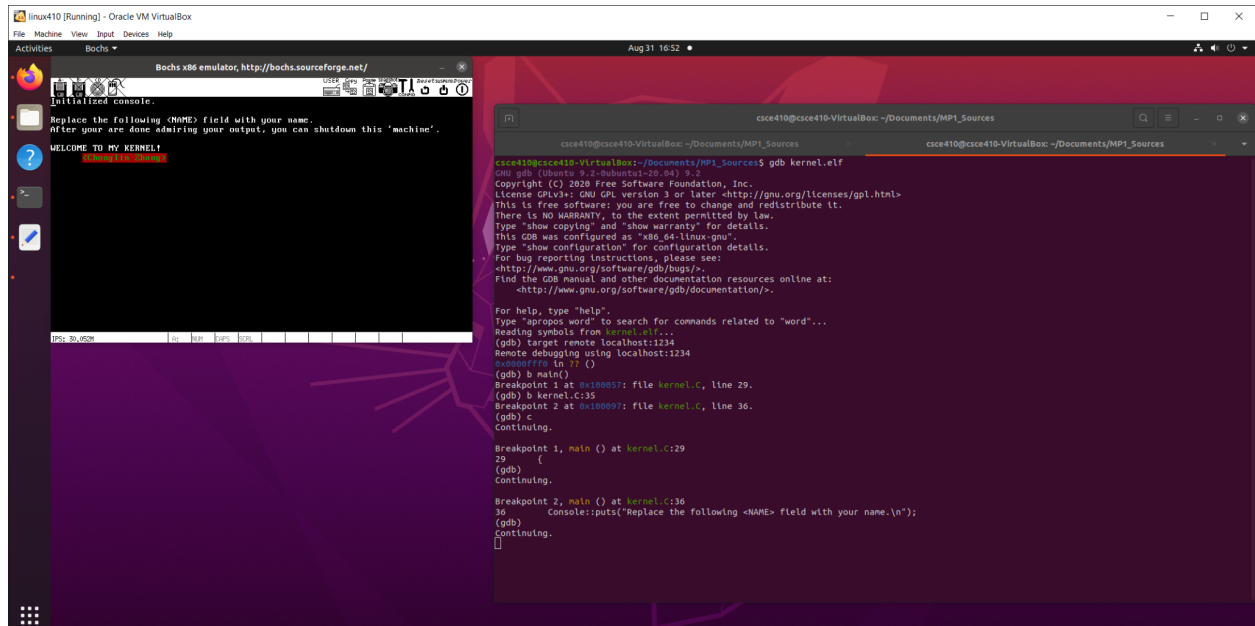5. Here is the kernel output:

Integrating GDB with Bochs

1. In the makefile, add gcc -g for utils, console, and kernel
2. For linked.ld, remove the first line
3. For copykernel.sh and makefile, change all 'bin' to 'elf'. For example, kernel.bin to kernel.elf
4. Run the makefile by using make
5. Run ./copykernel.sh

6. For bochsrc.bxrc file, adding this line: gdbstub: enabled=1, port=1234, text_base=0, data_base=0, bss_base=0
7. For GDB tools with bochs, here is the link for how to set up: https://people.engr.tamu.edu/bettati/Courses/OSProjects/the_bochs_environment.pdf
8. Using bochs -f bochsrc.bxrc -q for bochs
9. Open a new terminal and run gdb kernel.elf and run (gdb) target remote:1234
10. Here is the output with kernel and gdb. On gdb terminal, using b main() and b kernel.C:line to set the breakpoint