Exercise 44.2: Recovering from a Corrupted GRUB Configuration

1. Edit your **GRUB** configuration file (`/boot/grub/grub.cfg`, `/boot/grub2/grub.cfg` or `/boot/grub/grub.conf`), and modify the `kernel` line by removing the first character of the value in the field named `UUID`. Take note of which character you removed, you will replace it in rescue mode. (If your root filesystem is identified by either label or hard disk device node, make an analogous simple change.) Keep a backup copy of the original.
2. Reboot the machine. The system will fail to boot, saying something like `No root device` was found. You will also see that a `panic` occurred.
3. Insert into your machine the **installation** or **Live DVD** or **CD** or **USB** drive (or network boot media) if you have access to a functioning installation server). Reboot again. When the boot menu appears, choose to enter rescue mode.
4. As an alternative, you can try selecting a rescue image from the **GRUB** menu; most distributions offer this. You'll get the same experience as using rescue media, but it will not always work. For example, if the root filesystem is damaged it will be impossible to do anything.
5. In rescue mode, agree when asked to search for filesystems. If prompted, open a shell, and explore the rescue system by running utilities such as **mount** and **ps**.
6. Repair your broken system by fixing your **GRUB** configuration file, either by editing it or restoring from a backup copy.
7. Type `exit` to return to the installer, remove the boot media, and follow the instructions on how to reboot. Reboot your machine. It should come up normally.

