Exercise 28.2 Rebuilding the **RPM** Database

There are conditions under which the **RPM** database stored in `/var/lib/rpm` can be corrupted. In this exercise we will construct a new one and verify its integrity.

This lab will work equally well on **Red Hat** and **SUSE**-based systems.

1. Backup the contents of `/var/lib/rpm` as the rebuild process will overwrite the contents. If you neglect to do this and something goes wrong you are in serious trouble.
2. Rebuild the data base.
3. Compare the new contents of the directory with the backed up contents; don't examine the actual file contents as they are binary data, but note the number and names of the files.
4. Get a listing of all **rpms** on the system. You may want to compare this list with one generated before you actually do the rebuild procedure. If the query command worked, your new database files should be fine.
5. Compare again the two directory contents. Do they have the same files now?
6. You could delete the backup (probably about 100 MB in size) but you may want to keep it around for a while to make sure your system is behaving properly before trashing it.

You may want to look at `http://www.rpm.org/wiki/Docs/RpmRecovery` for a more complete examination of steps you can take to verify and/or recover the database integrity.

Solution 28.2

1. ```
   $ cd /var/lib
   $ sudo cp -a rpm rpm_BACKUP
   ```

2. ```
   $ sudo rpm --rebuilddb
   ```

3. ```
   $ ls -l rpm rpm_BACKUP
   ```

4. ```
   $ rpm -qa | tee /tmp/rpm-qa.output
   ```

5. ```
   $ ls -l rpm rpm_BACKUP
   ```

6. Probably you should not do this until you are sure the system is fine!

   ```
   $ sudo rm -rf rpm_BACKUP
   ```


   ```