A good example of the SUID bit is an existing command: **chsh**. The **chsh** command allows a regular user to change her login shell. Note the current permissions for this command:

-rws--x-- 1 root root 15432 Apr 29  2013 /usr/bin/chsh

The s in place of the user owner’s execute permission indicates this is an SUID command. When this command executes, it modifies the contents of the **/etc/passwd** file. The **/etc/passwd** file is not normally something that can be modified by non-root users; as you can see, normally only the root user has this ability:

[**Click here to view code image**](ch10_images.html#p299pro02a)

-rw-r--r-- 1 root root 2036 Mar  8 18:39 /etc/passwd

However, with the SUID permission set, the **chsh** program is able to access files as either the person who runs the command or as the owner of the **chsh** program (which, in this case, is root).

What if you, as the administrator, do not want users to change their login shells? Just execute the following command as root:

chmod u-s /usr/bin/chsh