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Tutorials for "Unix for Advanced Users"
Exercise sheet 2

Recapitulation Exercise:
The commands `Ctrl-@` or `Ctrl-Space` (in Emacs) or `m`x where x is a uppercase or lowercase letter (in vi) can be used to set a mark? What can one do with a mark? How can one do it?

Exercise 2.1:
How are the permission bits of the the directory `secret` set, if the commands

```
less secret/file123
```

and

```
rm secret/file456
```

can be executed by every user, whereas

```
less secret/file1*
```

can be executed only by the owner of `secret`?

Exercise 2.2:
Why should one attempt to terminate a process using `kill` before using `kill -9`?

Exercise 2.3:
Most user commands are executed by the shell using an external command (with fork/exec), but a few ones are executed by the shell process itself. Which of the following commands cannot be implemented using an external command? Why?

- cd
- mkdir
- rmdir

Do not submit your solution. Test (and revise, and test, ...) it on some Unix system and bring your solution (or solution attempt) to the tutorial We will use the tutorial to present working solutions and to have a look at problems you could not fix yourself.