Move (mv) and Copy (cp) tables
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For the second part of the checkout process, I propose the following cheat-sheet tables for understanding how the move (mv) and copy (cp) commands operate on different inputs and different requests of outcomes. In my experience, especially in running scripts on remote machines, I found the mv and cp commands very useful. There is a risk, however, to use them improperly and lose important work by overwriting or deleting important files (of course, one has to always have a back-up copy of his/her work!!). I suggest therefore to add the following tables in the lesson "The Unix Shell, part 3: working with files and directories" (http://swcarpentry.github.io/shell-novice/03-create/index.html). The purpose of the tables is to help the learner to understand very well how to use mv and cp commands in the correct way. I have experienced my self a loss of important files because of an improper use of the commands (fortunately, I had a backup of them). The tables can also be used as an exercise: the instructor can provide a blank or partially filled copy of the table and suggest the learners to fill the missing entries. The learner guesses (with proper reasoning) what is the result of a given application of mv or cp, and then tests his/her guess on a set of sample files and directories. This exercise can moreover help solidify the understanding of other commands that are used to explore files and directories (such as cd, ls, cat, less ...). The tables are in the second page of the document.

Tables

Here is a sample of the two tables. The level of information contained in the entries is very personal, it depends on the learner's background and style. It is a good idea to perform an entry-wise comparison of the two tables, in order to understand the difference between mv and cp.

Table 1. The move (mv) command

mv [From (file or directory)] [To (file or directory)] (with no extra options)

	To: Existing file	To: New file	To: Existing directory	To: New directory
From: File	Overwrite! Content of existing file will be lost	Rename file	Move file to directory	Not possible: first, you need to create the directory with mkdir
From: Directory	Not possible	Not possible	The "From" directory becomes a subdirectory of the "To" directory	Rename directory

Table 2. The copy (cp) command ↺ cp [From (file or directory)] [To (file or directory)] (with no extra options)

	To: Existing file	To: New file	To: Existing directory	To: New directory
From: File	Overwrite! Content of the "To" file will be lost	Make a copy of the file	Make a copy of the file into the directory	Not possible: first, you need to create the directory with mkdir
From: Directory	Not possible	Not possible	Make a copy of the "From" directory inside the "To" directory (need -r option)	Make a copy of the directory (need -r option)