

# Common Unix commands



This is a short list of the main commands that you can find in the demonstrations and practice tasks. Some common keys are shown in the examples.

|            |  |
|------------|--|
| man        | <p>General help about any command</p> <pre>man man</pre> <p>Help for the man command itself.</p>   |
| pwd        | <p>Display the current directory</p>   |
| cd         | <p>Change the current directory</p> <pre>cd /home/student/dev0; cd ..</pre> <p>Go to the directory containing the course handouts, and then to the directory one level above.</p>  |
| ls         | <p>List the contents of the current directory</p> <pre>ls -l ~</pre> <p>List the contents of the home directory in a detailed format.</p>  |
| sudo       | <p>Run a command with superuser (or other user) privileges</p> <pre>sudo -u postgres ls /var/lib/postgresql/17/main</pre> <p>View the cluster data directory (known as PGDATA).</p>  |
| su         | <p>Switch to superuser (or another user)</p> <pre>sudo su - postgres</pre> <p>Switch to the user <code>postgres</code>.</p> <p>The “-” character pulls the settings from the <code>.profile</code> file.</p>   |
| cat        | <p>Display the contents of a file</p> <pre>cat /etc/postgresql/17/main/postgresql.conf</pre> <p>The contents of the main configuration file.</p>   |
| tee        | <p>Output the data to the console and write it to a file</p> <pre>echo '\timing on'   tee -a .psqlrc</pre> <p>Add a line to a file and display it on the screen.</p>   |
| head, tail | <p>Display the beginning (or the end) of a file</p> <pre>sudo head -n 1 /var/lib/postgresql/17/main/postmaster.pid</pre> <p>The first line of the specified file (contains the postmaster process ID).</p> <pre>tail -n 5 /var/log/postgresql/postgresql-17-main.log</pre> <p>The last five lines of the server message log.</p> |

|              |   |
|--------------|---|
| grep         | <p>Filter specific lines from a file</p> <pre>cat /var/log/postgresql/postgresql-17-main.log   grep FATAL</pre> <p>Find lines with the word “FATAL” in the output of the <code>cat</code> command (the “ ” sign redirects the output of the <code>cat</code> command to the <code>grep</code> input).</p> <pre>grep ^[^\#] /etc/postgresql/17/main/pg_hba.conf</pre> <p>Regular expression: all lines of the file that do not start with the “#” sign.</p>  |
| sort         | <p>Sort lines</p> <pre>ls /etc/postgresql/17/main   sort</pre> <p>Sort the list of files in the specified directory by file name.</p>   |
| echo         | <p>Return text</p> <pre>sudo -u postgres echo 'work_mem = 16MB' &gt;&gt; 📄 /etc/postgresql/17/main/postgresql.conf</pre> <p>Append the string to the end of <code>postgresql.conf</code> (“&gt;” will just overwrite the file).</p>   |
| mkdir, rmdir | <p>Create (remove) a directory</p> <pre>mkdir ~/ts_dir</pre> <p>Create the specified directory. You can only delete an empty directory.</p>   |
| cp, mv       | <p>Copy (move) a file or directory</p> <pre>cp /etc/postgresql/17/main/postgresql.conf postgresql.conf.backup</pre> <p>Copy the specified file to the current directory under a different name.</p> <pre>cd ~; mv dev0/ dev0_handouts/</pre> <p>Move the course handouts directory to another location (rename it).</p>   |
| rm           | <p>Delete a file</p> <pre>sudo rm /var/log/postgresql/postgresql-17-main.log</pre> <p>Delete the server log.</p>  |
| find         | <p>Find files</p> <pre>sudo find /etc -name postgresql</pre> <p>Find files and directories by name in the <code>/etc</code> directory and its subdirectories.</p> <pre>find /etc -maxdepth 1 -name *.conf -type f</pre> <p>Find files ending with <code>.conf</code> in the <code>/etc</code> directory (excluding subdirectories).</p> <pre>sudo find /var/lib/postgresql/17/main -size +10M -size -20M</pre> <p>Find files larger than 10MB but smaller than 20MB in the <code>/var/lib/postgresql/17/main</code> directory and its subdirectories.</p> |
| time         | <p>Execute another command and mark the time</p> <pre>time sleep 1</pre> <p>How long does a command that pauses for one second run?</p>   |


**date**            Return current date and time

```
date '+%D_%T'
```

The current date and time in the specified format.

**ps**             List of processes

```
ps -o pid,command --ppid `sudo head -n 1
```

```
 /var/lib/postgresql/17/main/postmaster.pid`
```

A list of processes ran by **postmaster**

(a command in `back quotes` its substituted with its output when ran).

**sed**            Streaming text editor

Use a regular text editor. Sed is useful for writing scripts.