# Cheat sheets and checklists

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## Basic commands

| Task | Command |
|---|---|
| Change directory | `cd DIRECTORY` |
| List files | `ls -l` |
| Create directory | `mkdir DIRECTORY` |
| Create empty file | `touch FILE` |
| Copy file | `cp FILE DEST` |
| Move file | `mv FILE DEST` |

## Docker commands

| Task | Command |
|---|---|
| List all containers | `docker ps -a` |
| List all images | `docker images` |
| Stop a container | `docker stop CONTAINER` |
| Remove a container | `docker rm CONTAINER` |

## Git workflow

Simple workflow for a personal project without other contributors:

| Task | Command |
|---|---|
| Current project status | `git status` |
| Select files to be committed | `git add FILE...` |
| Commit changes to local repository | `git commit -m 'MESSAGE'` |
| Push local changes to remote repository | `git push` |
| Pull changes from remote repository to local | `git pull` |

## Checklist network configuration

1. Is the IP address correct? `ip a`
2. Is the router/default gateway correct? `ip r -n`

3. Is a DNS-server available? `cat /etc/resolv.conf`

## Labo 1 Docker

| Task | Command |
|---|---|
| Change directory | `cd .\resources\02-dockerlab\` |
| Start Portainer Container | `docker compose -f .\docker-compose.portainer.yml up -d` |
| Build Docker Image | `docker build -t webapp .` |
| Run Docker Image | `docker run -d -p 3000:3000 --name webapp_container webapp` |
| Fetch Animal Data (GET) | `curl http://localhost:3000/animals` |
| Add Animal Data (POST) | `curl -X POST -H "Content-Type: application/json" -d '{"name":"Lion","age":4}' http://localhost:3000/animals` |
| Remove Docker Container | `docker rm webapp_container` |
| Start Webapp and Database | `docker compose up -d` |
| Stop Docker Container | `docker stop webapp_container` |
| Update .gitignore | `echo "dockerlab/webapp/database" >> .gitignore` |
| Copy Docker Compose File | `cp docker-compose.yml docker-compose-sqlite.yml` |
| Run Tests | `docker compose run test` |

## Labo 2 CI/CD

| Task | Command |
|---|---|
| Set global username | `git config --global user.name "Your Name"` |
| Set global email | `git config --global user.email "Your@Name.com"` |
| Check Git configuration | `git config --global --list` |
| Initialize a Git repository | `git init` |
| Add all files to staging | `git add .` |
| Commit with a message | `git commit -m "Your commit message"` |

| Task | Command |
| --- | --- |
| Push to the main branch | `git push origin main` |
| Clone a repository | `git clone <repository-url>` |
| Set remote origin | `git remote add origin <repository-url>` |
| Install project dependencies | `yarn install` |
| Run linter | `yarn lint` |
| Run tests | `yarn test` |
| Create a Docker image | `docker build -t <image-name> .` |
| Run a Docker container | `docker run -p 3000:3000 <image-name>` |
| Push Docker image to Docker Hub | `docker push <dockerhub-username>/<image-name>` |
| Pull Docker image from Docker Hub | `docker pull <dockerhub-username>/<image-name>` |