

## 1.1

```
PS C:\Users\laura> docker version
Client:
Version:      27.4.0
API version:  1.47
Go version:   go1.22.10
Git commit:   bde2b89
Built:        Sat Dec  7 10:40:21 2024
OS/Arch:      windows/amd64
Context:      desktop-linux

Server: Docker Desktop 4.37.1 (178610)
Engine:
Version:      27.4.0
API version:  1.47 (minimum version 1.24)
Go version:   go1.22.10
Git commit:   92a8393
Built:        Sat Dec  7 10:38:57 2024
OS/Arch:      linux/amd64
Experimental: false
containerd:
Version:      1.7.21
GitCommit:    472731909fa34bd7bc9c087e4c27943f9835f111
runc:
Version:      1.1.13
GitCommit:    v1.1.13-0-g58aa920
docker-init:
Version:      0.19.0
GitCommit:    de40ad0
PS C:\Users\laura> |
```

```
PS C:\Users\laura> docker --help

Usage:  docker [OPTIONS] COMMAND

A self-sufficient runtime for containers

Common Commands:
  run         Create and run a new container from an image
  exec        Execute a command in a running container
  ps          List containers
  build       Build an image from a Dockerfile
  pull        Download an image from a registry
  push        Upload an image to a registry
  images      List images
  login        Authenticate to a registry
  logout      Log out from a registry
  search      Search Docker Hub for images
  version     Show the Docker version information
  info        Display system-wide information

Management Commands:
  ai*         Ask Gordon - Docker Agent
  builder     Manage builds
```

```

PS C:\Users\laura> docker pull --help

Usage: docker pull [OPTIONS] NAME[:TAG|@DIGEST]

Download an image from a registry

Aliases:
  docker image pull, docker pull

Options:
  -a, --all-tags          Download all tagged images in the repository
  --disable-content-trust Skip image verification (default true)
  --platform string       Set platform if server is multi-platform
                           capable
  -q, --quiet             Suppress verbose output
PS C:\Users\laura>

```

- No hay argumentos absolutamente requeridos puesto que nos indican que todos son opcionales
- Un registro es una unidad de memoria que guarda un solo dato

1.2

```

PS C:\Users\laura> docker pull japeto/pujgcc:latest
latest: Pulling from japeto/pujgcc
Digest: sha256:9b3d7bbf410396d0a26e6bcffbb54e4239736d5a23ad694b03d93c26f9fc6868
Status: Image is up to date for japeto/pujgcc:latest
docker.io/japeto/pujgcc:latest

```

```

PS C:\Users\laura> docker images
REPOSITORY          TAG          IMAGE ID          CREATED           SIZE
lauisa/helloso      latest      94e69f338da6     23 hours ago     1.42GB
japeto/pujgcc       latest      05141310a94c     24 months ago    1.39GB

```

- El tamaño de la imagen japeto/pujgcc es de 1.39GB
- EL Image ID es 05141310a94c

```

PS C:\Users\laura> docker inspect japeto/pujgcc:latest
[
  {
    "Id": "sha256:05141310a94cb489b6279ffac005b91f5c7ff81946f29ee02de5910dc4d9b3e8",
    "RepoTags": [
      "japeto/pujgcc:latest"
    ],
    "RepoDigests": [
      "japeto/pujgcc@sha256:9b3d7bbf410396d0a26e6bcffbb54e4239736d5a23ad694b03d93c26f9fc6868"
    ],
    "Parent": "",
    "Comment": "buildkit.dockerfile.v0",
    "Created": "2023-02-08T03:10:14.416761058Z",
    "DockerVersion": "",
    "Author": "",
    "Config": {
      "Hostname": "",
      "Domainname": "",
      "User": "",
      "AttachStdin": false,
      "AttachStdout": false,
      "AttachStderr": false,
      "Tty": false,
      "OpenStdin": false,
      "StdinOnce": false,
      "Env": [
        "PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin",
        "GPG_KEYS=B215C1633BCA0477615F1B35A5B3A004745C015A \tB3C42148A44E6983B3E4CC0793FA9B1AB75C61B8 \t90AA470469D3965A87A5DCB494D03953902C9419 \t80F98B2E0DAB6C8281BDF541A7C8C3B2F71EDF1C \t7F74F97C103468EE5D750B583AB00996FC26A641 \t33C235A34C46AA3FFB293709A328C3A2C3C45C06",
        "GCC_VERSION=4.9.4"
      ],
      "Cmd": [
        "bash"
      ],
      "ArgsEscaped": true,
      "Image": "",
      "Volumes": null,
      "WorkingDir": ""
    }
  }
]

```

- La arquitectura es “amd64”
- Si, es linux

```

PS C:\Users\laura> docker run --help

Usage:  docker run [OPTIONS] IMAGE [COMMAND] [ARG...]

Create and run a new container from an image

Aliases:
  docker container run, docker run

Options:
  --add-host list          Add a custom host-to-IP mapping
                           (host:ip)
  --annotation map        Add an annotation to the
                           container (passed through to the
                           OCI runtime) (default map[])
  -a, --attach list       Attach to STDIN, STDOUT or STDERR
  --blkio-weight uint16    Block IO (relative weight),
                           between 10 and 1000, or 0 to
                           disable (default 0)
  --blkio-weight-device list
                           Block IO weight (relative device
                           weight) (default [])
  --cap-add list          Add Linux capabilities
  --cap-drop list         Drop Linux capabilities
  --cgroup-parent string   Optional parent cgroup for the
                           container
  --cgroupns string       Cgroup namespace to use
                           (host|private)
                           'host':    Run the container in
                           the Docker host's cgroup
                           namespace
                           'private': Run the container in
                           its own private cgroup namespace
                           '':        Use the cgroup
                           namespace as configured by the
                           default-cgroupns-mode
                           option on the daemon (default)
  --cidfile string        Write the container ID to the file
  --cpu-period int         Limit CPU CFS (Completely Fair
                           Scheduler) period
  --cpu-quota int          Limit CPU CFS (Completely Fair

```

- Una imagen es la plantilla que seguirá el contenedor y el contenedor es una instancia de una plantilla

```

PS C:\Users\laura> docker run japeto/pujgcc bash --help
GNU bash, version 4.3.30(1)-release-(x86_64-pc-linux-gnu)
Usage: bash [GNU long option] [option] ...
        bash [GNU long option] [option] script-file ...
GNU long options:
    --debug
    --debugger
    --dump-po-strings
    --dump-strings
    --help
    --init-file
    --login
    --noediting
    --noprofile
    --norc
    --posix
    --rcfile
    --restricted
    --verbose
    --version
Shell options:
    -ilrsD or -c command or -O shopt_option          (invocation only)
    -abefhkmnptuvxBCHP or -o option
Type 'bash -c "help set"' for more information about shell options.
Type 'bash -c help' for more information about shell builtin commands.
Use the 'bashbug' command to report bugs.

```

- Se despliega una lista de opciones para GNU y Shell, es un mensaje de bash

```

PS C:\Users\laura> docker run -it japeto/pujgcc bash
root@dea6e3b5f79a:/# pwd
/
root@dea6e3b5f79a:/# ls
bin    dev    home  lib64  mnt    proc   run    srv    tmp    var
boot  etc    lib   media  opt    root   sbin   sys    usr
PS C:\Users\laura> docker inspect --format='{{.Config.Volumes}}' japeto/pujgcc:latest
map[]

```

```
PS C:\Users\laura> docker run -v ${PWD}:/home/ japeto/pujgcc:latest ls /home/  
AppData  
Cisco Packet Tracer 8.2.2  
Configuración local  
Contacts  
Cookies  
Datos de programa  
Documents  
Downloads  
Entorno de red  
Favorites  
Impresoras  
Links  
Menú Inicio  
Mis documentos  
Music  
My project  
NTUSER.DAT  
NTUSER.DAT{a2332f18-cdbf-11ec-8680-002248483d79}.TM.blf  
NTUSER.DAT{a2332f18-cdbf-11ec-8680-002248483d79}.TMContainer000000000000000001.regtrans-ms  
NTUSER.DAT{a2332f18-cdbf-11ec-8680-002248483d79}.TMContainer000000000000000002.regtrans-ms  
OneDrive  
Plantillas  
Reciente  
Saved Games  
Searches  
SendTo  
Temp - Acceso directo.lnk  
Videos  
VirtualBox VMs  
ansel  
ntuser.dat.LOG1  
ntuser.dat.LOG2  
ntuser.ini  
temporal
```

- El directorio actual es /
- Tiene 19 carpetas
- Si, existe una carpeta llamada home