

PARTE 1

Cap1

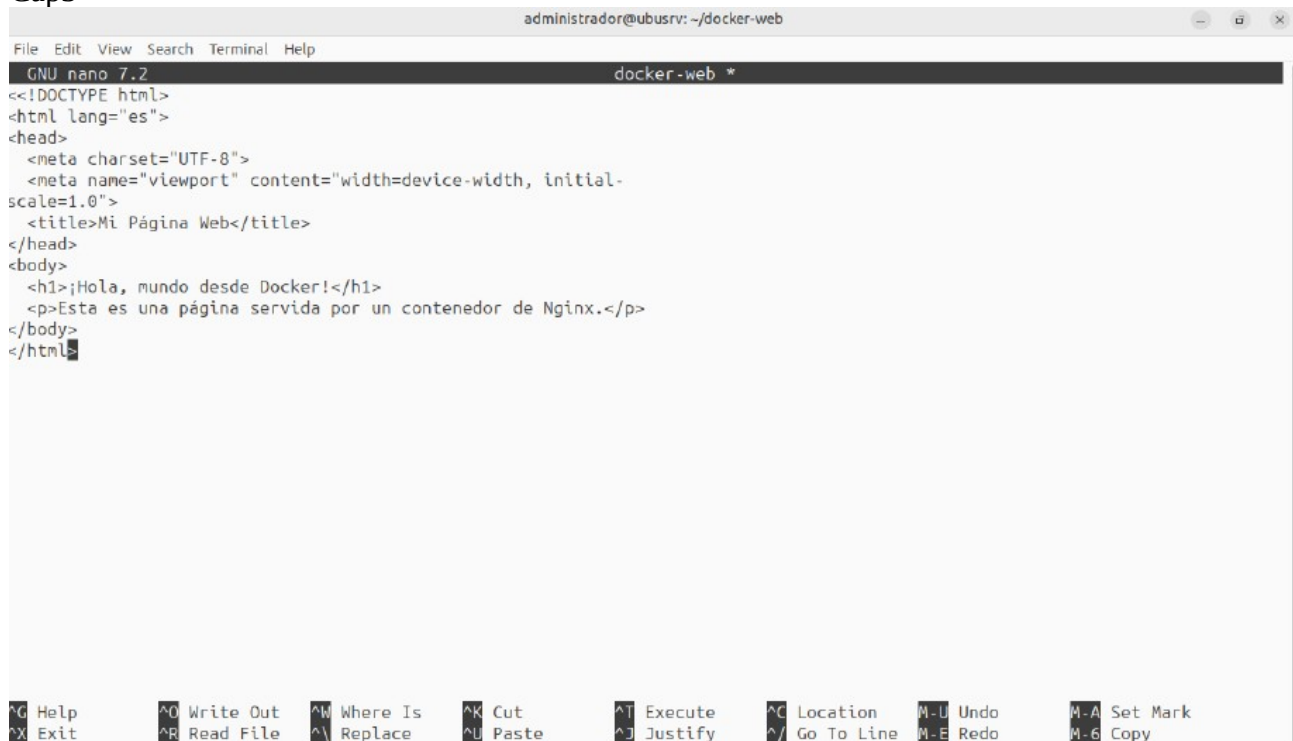
```
administrador@ubusrv:~$ docker --version
Docker version 29.0.2, build 8108357
```

```
administrador@ubusrv:~$ docker compose version
Docker Compose version v2.40.3
```

Cap2

```
administrador@ubusrv:~$ mkdir docker-web
administrador@ubusrv:~$ cd docker-web
```

Cap3



The screenshot shows a terminal window titled 'administrador@ubusrv: ~/docker-web'. Inside, the nano 7.2 text editor is open, editing a file named 'index.html'. The editor's status bar at the top indicates 'GNU nano 7.2' and 'docker-web *'. The content of the file is an HTML document with the following structure:

```
<<!DOCTYPE html>
<html lang="es">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-
scale=1.0">
  <title>Mi Página Web</title>
</head>
<body>
  <h1>¡Hola, mundo desde Docker!</h1>
  <p>Esta es una página servida por un contenedor de Nginx.</p>
</body>
</html>
```

The bottom of the terminal window displays a row of keyboard shortcuts for nano: ^G Help, ^O Write Out, ^W Where Is, ^K Cut, ^T Execute, ^C Location, ^U Undo, ^M-A Set Mark, ^X Exit, ^R Read File, ^\ Replace, ^V Paste, ^J Justify, ^_ Go To Line, ^-E Redo, and ^M-6 Copy.

Cap4

```
administrador@ubusrv:~/docker-web$ mkdir default.conf
administrador@ubusrv:~/docker-web$ cd default.conf
```

Cap5



The screenshot shows a terminal window titled 'administrador@ubusrv: ~/docker-web/default.conf'. Inside, the nano 7.2 text editor is open, editing a file named 'default.conf'. The editor's status bar at the top indicates 'GNU nano 7.2' and 'default.conf *'. The content of the file is an Nginx configuration snippet:

```
server {
  listen 80;
  server_name localhost;

  location / {
    root /usr/share/nginx/html;
    index index.html;
  }
}
```

The bottom of the terminal window displays the same row of keyboard shortcuts for nano as seen in the previous screenshot.

PARTE 2

Cap 1

```
administrador@ubusrv: ~/docker-web/Dockerfile
File Edit View Search Terminal Help
GNU nano 7.2 Dockerfile
# Usar la imagen oficial de Nginx como base
FROM nginx:latest

# Copiar la configuración personalizada de Nginx al contenedor
COPY default.conf /etc/nginx/conf.d/default.conf

# Copiar la página web al contenedor
COPY index.html /usr/share/nginx/html/index.html

# Cambiar al usuario no privilegiado para mayor seguridad
USER nginx
```

Cap2

```
administrador@ubusrv: ~/docker-web
File Edit View Search Terminal Help
=> [internal] load metadata for docker.io/library/nginx:latest 1.7s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [1/3] FROM docker.io/library/nginx:latest@sha256:ceac0cf9899a7635bca94200e634aaa5183386f544dc16522f5b98f27d77039a 7.2s
=> => resolve docker.io/library/nginx:latest@sha256:ceac0cf9899a7635bca94200e634aaa5183386f544dc16522f5b98f27d77039a 0.0s
=> => sha256:de57a609c9d5148f10b38f5c920d276e9e38b2856fe16c0aae1450613dc12051 1.40kB / 1.40kB 0.3s
=> => sha256:192e2451f8751fb74549c932e26a9bcfd7b669fe2f5bd8381ea5ac65f09b256b 1.21kB / 1.21kB 0.5s
=> => sha256:77fa2eb0631772679b0e48eca04f4906fba5fe94377e01618873a4a1171107ce 404B / 404B 0.5s
=> => sha256:53d743880af45adf9f141eec1fe3a413087e528075a5d8884d6215ddfd2b806 954B / 954B 0.9s
=> => sha256:108ab82928207dabd9abfddbc960dd842364037563fc560b8f6304e4a91454fe 628B / 628B 0.4s
=> => sha256:0e4bc2bd6656e004e3c749af70e5650bac2258243eb0949dea51cb8b7863db 29.78MB / 29.78MB 4.3s
=> => sha256:b5feb73171bf1bcf29fdd1ba642c3d30cdf4c6329b19d89be14d209d778c89ba 29.97MB / 29.97MB 5.9s
=> => extracting sha256:0e4bc2bd6656e004e3c749af70e5650bac2258243eb0949dea51cb8b7863db 1.4s
=> => extracting sha256:b5feb73171bf1bcf29fdd1ba642c3d30cdf4c6329b19d89be14d209d778c89ba 0.6s
=> => extracting sha256:108ab82928207dabd9abfddbc960dd842364037563fc560b8f6304e4a91454fe 0.0s
=> => extracting sha256:53d743880af45adf9f141eec1fe3a413087e528075a5d8884d6215ddfd2b806 0.0s
=> => extracting sha256:77fa2eb0631772679b0e48eca04f4906fba5fe94377e01618873a4a1171107ce 0.0s
=> => extracting sha256:192e2451f8751fb74549c932e26a9bcfd7b669fe2f5bd8381ea5ac65f09b256b 0.0s
=> => extracting sha256:de57a609c9d5148f10b38f5c920d276e9e38b2856fe16c0aae1450613dc12051 0.0s
=> [internal] load build context 0.0s
=> => transferring context: 508B 0.0s
=> [2/3] COPY default.conf /etc/nginx/conf.d/default.conf 0.7s
=> [3/3] COPY index.html /usr/share/nginx/html/index.html 0.1s
=> exporting to image 0.3s
=> => exporting layers 0.1s
=> => exporting manifest sha256:f3b94507f9afc6678e43e5870bc43961b63e909542f509bf15e3a2a055c2c881 0.0s
=> => exporting config sha256:be8a0fdb733894926c801763eab32ec3fdb10ecdd117e123798b2d5c3ab2e41 0.0s
=> => exporting attestation manifest sha256:e64575c39eeb45dacbbc95e7f3923f4eff920497534fc2579eed39dce36f1dc 0.0s
=> => exporting manifest list sha256:000814c83b6e166439d2fa5db6c2711f7ed04115e623f152dc631cb2e1ce3de4 0.0s
=> => naming to docker.io/library/mi-nginx:latest 0.0s
=> => unpacking to docker.io/library/mi-nginx:latest 0.0s
administrador@ubusrv:~/docker-web$
```

Cap3

```
administrador@ubusrv:~/docker-web$ sudo docker images
```

IMAGE	ID	DISK USAGE	CONTENT SIZE	EXTRA
hello-world:latest	f7931603f70e	20.3kB	3.96kB	U
mi-nginx:latest	000814c83b6e	225MB	59.8MB	

```
administrador@ubusrv:~/docker-web$
```

PARTE 3

Cap1

```
administrador@ubusrv:~/docker-web$ sudo docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NA
14915e0d8d3f	mi-nginx	"/docker-entrypoint..."	5 seconds ago	Up 5 seconds	0.0.0.0:8080->80/tcp, [::]:8080->80/tcp	se

```
rvidor-web
```

Cap2

← → ↻ 🏠 ☆ 📄 ☰

¡Hola, mundo desde Docker!

Esta es una página servida por un contenedor de Nginx.

PARTE 4

Cap1

```
administrador@ubusrv: ~/docker-web
File Edit View Search Terminal Help
GNU nano 7.2 docker-compose.yml
version: '3.8'
services:
  web:
    build: .
    ports:
      - "8080:80"
    container_name: servidor-web-compose
    volumes:
      - ./index.html:/usr/share/nginx/html/index.html:ro # Volumen en modo solo lectura (ro)
      - ./default.conf:/etc/nginx/conf.d/default.conf:ro # Volumen en modo solo lectura (ro)
    restart: always # Reinicia automáticamente si falla el contenedor
```

Cap2

```
administrador@ubusrv: ~/docker-web
File Edit View Search Terminal Help
=> [internal] load metadata for docker.io/library/nginx:latest 1.0s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [1/4] FROM docker.io/library/nginx:latest@sha256:553f64aecdc31b5bf944521731cd70e35da4faed96b 0.0s
=> => resolve docker.io/library/nginx:latest@sha256:553f64aecdc31b5bf944521731cd70e35da4faed96b 0.0s
=> [internal] load build context 0.0s
=> => transferring context: 64B 0.0s
=> CACHED [2/4] COPY default.conf /etc/nginx/conf.d/default.conf 0.0s
=> CACHED [3/4] RUN mkdir -p /var/cache/nginx && chown -R nginx:nginx /var/cache/nginx 0.0s
=> CACHED [4/4] COPY index.html /usr/share/nginx/html/index.html 0.0s
=> exporting to image 0.1s
=> => exporting layers 0.0s
=> => exporting manifest sha256:0e98834b98f153fdf5e412ecfd54fc86f4d8e531a944995dbb709d273d4175d 0.0s
=> => exporting config sha256:148f1b9a61e4e3dbfab6145c2a4ebcd2deed94e5bde642ecf08fa00993ce3660 0.0s
=> => exporting attestation manifest sha256:0d1b5f92df79a9a039c16ea9ca24b765dd2447faaa719ce1e5d 0.0s
=> => exporting manifest list sha256:052505f180bf80d444e5860b726096fb7393b9d11eff2e2f14a54c7b5d 0.0s
=> => naming to docker.io/library/docker-web-web:latest 0.0s
=> => unpacking to docker.io/library/docker-web-web:latest 0.0s
=> resolving provenance for metadata file 0.0s
[+] Running 3/3
✔ docker-web-web Built 0.0s
✔ Network docker-web_default Created 0.1s
✔ Container servidor-web-compose Started 0.5s
administrador@ubusrv: ~/docker-web$
```


Cap3

```
administrador@ubusrv:~/docker-web$ sudo docker compose ps
WARN[0000] /home/administrador/docker-web/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
```

NAME	IMAGE	COMMAND	SERVICE
CREATED	STATUS	PORTS	
servidor-web-compose	docker-web-web	"/docker-entrypoint...."	web
About a minute ago	Up About a minute	0.0.0.0:8080->80/tcp, [::]:8080->80/tcp	

Cap4

```
administrador@ubusrv:~/docker-web$ sudo docker compose logs web
WARN[0000] /home/administrador/docker-web/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
servidor-web-compose | /docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
servidor-web-compose | /docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
servidor-web-compose | /docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
servidor-web-compose | 10-listen-on-ipv6-by-default.sh: info: can not modify /etc/nginx/conf.d/default.conf (read-only file system?)
servidor-web-compose | /docker-entrypoint.sh: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
servidor-web-compose | /docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
servidor-web-compose | /docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
servidor-web-compose | /docker-entrypoint.sh: Configuration complete; ready for start up
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: using the "epoll" event method
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: nginx/1.29.3
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: built by gcc 14.2.0 (Debian 14.2.0-19)
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: OS: Linux 6.8.0-87-generic
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1024:524288
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: start worker processes
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: start worker process 21
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: start worker process 22
servidor-web-compose | 172.18.0.1 - - [22/Nov/2025:17:21:50 +0000] "GET / HTTP/1.1" 304 0 "-" "Mozilla/5.0 (X11; Ubuntu; Linu
x x86_64; rv:145.0) Gecko/20100101 Firefox/145.0" "-"
administrador@ubusrv:~/docker-web$
```

Cap5

```
administrador@ubusrv:~/docker-web$ sudo docker compose down
WARN[0000] /home/administrador/docker-web/docker-compose.yml: the attribute `version` is obsolete, it will be ignored, please remove it to avoid potential confusion
[+] Running 2/2
 ✓ Container servidor-web-compose Removed 0.2s
 ✓ Network docker-web_default Removed 0.1s
```

PARTE 5

Cap1

```
administrador@ubusrv:~/docker-web$ sudo docker container prune
WARNING! This will remove all stopped containers.
Are you sure you want to continue? [y/N] y
Deleted Containers:
14915e0d8d3f8dd4f23d3a19ed96aaf49c2bd3eb764a10d3ffb94fab15ef7b5c

Total reclaimed space: 77.82kB
```

Cap2

```
administrador@ubusrv: ~/docker-web
File Edit View Search Terminal Help
system?)
servidor-web-compose | /docker-entrypoint.sh: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
servidor-web-compose | /docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
servidor-web-compose | /docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
servidor-web-compose | /docker-entrypoint.sh: Configuration complete; ready for start up
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: using the "epoll" event method
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: nginx/1.29.3
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: built by gcc 14.2.0 (Debian 14.2.0-19)
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: OS: Linux 6.8.0-87-generic
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1024:524288
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: start worker processes
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: start worker process 21
servidor-web-compose | 2025/11/22 17:21:11 [notice] 1#1: start worker process 22
servidor-web-compose | 172.18.0.1 - - [22/Nov/2025:17:21:50 +0000] "GET / HTTP/1.1" 304 0 "-" "Mozilla/5.0 (X11; Ubuntu; Linu
x x86_64; rv:145.0) Gecko/20100101 Firefox/145.0" "-"
administrador@ubusrv:~/docker-web$ sudo docker compose down
WARN[0000] /home/administrador/docker-web/docker-compose.yml: the attribute 'version' is obsolete, it will be ignored, please
remove it to avoid potential confusion
[+] Running 2/2
  ✓ Container servidor-web-compose Removed 0.2s
  ✓ Network docker-web_default Removed 0.1s
administrador@ubusrv:~/docker-web$ sudo docker container prune
WARNING! This will remove all stopped containers.
Are you sure you want to continue? [y/N] y
Deleted Containers:
14915e0d8d3f8dd4f23d3a19ed96aaf49c2bd3eb764a10d3ffb94fab15ef7b5c

Total reclaimed space: 77.82kB
administrador@ubusrv:~/docker-web$ sudo docker rmi mi-nginx
Untagged: mi-nginx:latest
Deleted: sha256:1233d1e8f55b2409d0c5dd88636e1931cef887b55a73e08abe86d3b34c3f2abe
administrador@ubusrv:~/docker-web$
```