DOCKER TEMEL KOMUTLAR

docker search <image_name>: İstediğimiz image'in adını yazarak depolarda image ararız.

```
C:\Users\furka>docker search nginx
NAME                               DESCRIPTION                              STARS    OFFICIAL
nginx                              Official build of Nginx.                 20036    [OK]
unit                               Official build of NGINX Unit: Universal Web …   33    [OK]
nginx/nginx-ingress                NGINX and  NGINX Plus Ingress Controllers fo…  92
nginxinc/nginx-unprivileged        Unprivileged NGINX Dockerfiles           155
nginx/nginx-prometheus-exporter    NGINX Prometheus Exporter for NGINX and NGIN…  42
nginx/unit                         This repository is retired, use the Docker o…  63
nginxinc/nginx-s3-gateway          Authenticating and caching gateway based on …  6
nginx/nginx-ingress-operator       NGINX Ingress Operator for NGINX and NGINX P…  2
nginx/nginx-quic-qns               NGINX QUIC interop                       1
nginxinc/amplify-agent             NGINX Amplify Agent docker repository    1
nginxinc/ingress-demo              Ingress Demo                             4
nginxproxy/nginx-proxy             Automated nginx proxy for Docker containers …  143
nginx/unit-preview                 Unit preview features                    0
nginxproxy/acme-companion          Automated ACME SSL certificate generation fo…  137
bitnami/nginx                      Bitnami container image for NGINX        193
ubuntu/nginx                       Nginx, a high-performance reverse proxy & we…  115
nginxproxy/docker-gen              Generate files from docker container meta-da…  17
nginxinc/mra-fakes3                                                         0
kasmweb/nginx                      An Nginx image based off nginx:alpine and in…  8
bitnami/nginx-ingress-controller   Bitnami container image for NGINX Ingress Co…  34
bitnami/nginx-exporter             Bitnami container image for NGINX Exporter   5
nginxinc/ngx-rust-tool                                                      0
nginxinc/mra_python_base                                                    0
rancher/nginx                                                              2
```

docker pull <image_name>: parametre olarak verdiğimiz image'i indirir

```
C:\Users\furka>docker pull nginx
Using default tag: latest
latest: Pulling from library/nginx
efc2b5ad9eec: Pull complete
8fe9a55eb80f: Pull complete
045037a63be8: Pull complete
7111b42b4bfa: Pull complete
3dfc528a4df9: Pull complete
9e891cdb453b: Pull complete
0f11e17345c5: Pull complete
Digest: sha256:6af79ae5de407283dcea8b00d5c37ace95441fd58a8b1d2aa1ed93f5511bb18c
Status: Downloaded newer image for nginx:latest
docker.io/library/nginx:latest

What's next:
    View a summary of image vulnerabilities and recommendations → docker scout quickview nginx
```

docker image ls : indirdiğimiz image'leri listeler.

```
C:\Users\furka>docker image ls
REPOSITORY    TAG       IMAGE ID        CREATED         SIZE
alpine        latest    324bc02ae123    44 hours ago    7.8MB
nginx         latest    a72860cb95fd    4 weeks ago     188MB
```

docker image rm <id>: id'sini girdiğimiz image'i kaldırır.

```
C:\Users\furka>docker image rm 324bc02ae123
Untagged: alpine:latest
Untagged: alpine@sha256:0a4eaa0eecf5f8c050e5bba433f58c052be7587ee8af3e8b3910ef9ab5fbe9f5
Deleted: sha256:324bc02ae1231fd9255658c128086395d3fa0aedd5a41ab6b034fd649d1a9260
Deleted: sha256:78561cef0761903dd2f7d09856150a6d4fb48967a8f113f3e33d79effbf59a07
```

docker image inspect \<name/id\> : id'si veya ismini girdiğimiz image'in ayrıntılı bilgilerini getirir.

```
C:\Users\furka>docker image inspect nginx
[
    {
        "Id": "sha256:a72860cb95fd59e9c696c66441c64f18e66915fa26b249911e83c3854477ed9a",
        "RepoTags": [
            "nginx:latest"
        ],
        "RepoDigests": [
            "nginx@sha256:6af79ae5de407283dcea8b00d5c37ace95441fd58a8b1d2aa1ed93f5511bb18c"
        ],
        "Parent": "",
        "Comment": "buildkit.dockerfile.v0",
        "Created": "2024-06-21T02:12:35Z",
        "ContainerConfig": {
            "Hostname": "",
            "Domainname": "",
            "User": "",
            "AttachStdin": false,
            "AttachStdout": false,
            "AttachStderr": false,
            "Tty": false,
            "OpenStdin": false,
            "StdinOnce": false,
            "Env": null,
            "Cmd": null,
            "Image": "",
            "Volumes": null,
            "WorkingDir": "",
            "Entrypoint": null,
            "OnBuild": null,
            "Labels": null
        },
        "DockerVersion": "",
        "Author": "",
        "Config": {
            "Hostname": "",
            "Domainname": "",
            "User": "",
```

docker image prune : Kullanılamayan bütün image'leri kaldırır

```
C:\Users\furka>docker image prune
WARNING! This will remove all dangling images.
Are you sure you want to continue? [y/N] _
```

docker volume create \<name\> : \<name\> adında volume oluşturur.

```
C:\Users\furka>docker volume create Deneme
Deneme
```

	Name ↑	Status	Created	Size	Actions			
☐	**Deneme**	-	21 seconds ago	0 Bytes	⊙	⊙	⬜	⋮

docker volume inspect \<name\>: \<name\> hakkında ayrıntılı bilgiler verir.

```
C:\Users\furka>docker volume inspect Deneme
[
    {
        "CreatedAt": "2024-07-24T19:10:22Z",
        "Driver": "local",
        "Labels": null,
        "Mountpoint": "/var/lib/docker/volumes/Deneme/_data",
        "Name": "Deneme",
        "Options": null,
        "Scope": "local"
    }
]
```

docker volume ls : volume'leri listeler.

```
C:\Users\furka>docker volume ls
DRIVER      VOLUME NAME
local       Deneme
```

docker volume rm <name>: verilen <name> 'ye sahip olan volume'ı siler.

```
C:\Users\furka>docker volume rm Deneme        C:\Users\furka>docker volume ls
Deneme                                        DRIVER    VOLUME NAME
```

docker volume prune : bütün volume'leri kaldırır.

docker container ps : çalışan container'ları listeler.

```
C:\Users\furka>docker container ps
CONTAINER ID   IMAGE   COMMAND                CREATED          STATUS          PORTS      NAMES
99c12d2b5876   nginx   "/docker-entrypoint.…"  12 minutes ago   Up 8 seconds    80/tcp     dreamy_wescoff
```

docker container ps –a:bütün container'ları listleler.

```
C:\Users\furka>docker container ps  -a
CONTAINER ID   IMAGE   COMMAND                CREATED          STATUS                      PORTS      NAMES
99c12d2b5876   nginx   "/docker-entrypoint.…"  14 minutes ago   Exited (0) About a minute ago          dreamy_wescoff
```

docker container inspect <id>: container hakkında bilgiler verir.

```
C:\Users\furka>docker container inspect 99c12d2b5876
[
    {
        "Id": "99c12d2b58763fa1305beff10ad77745ba6d2419d90d513a74cdbf47b54204c8",
        "Created": "2024-07-24T19:24:28.790916837Z",
        "Path": "/docker-entrypoint.sh",
        "Args": [
            "nginx",
            "-g",
            "daemon off;"
        ],
        "State": {
            "Status": "exited",
            "Running": false,
            "Paused": false,
            "Restarting": false,
            "OOMKilled": false,
            "Dead": false,
            "Pid": 0,
            "ExitCode": 0,
            "Error": "",
            "StartedAt": "2024-07-24T19:36:38.314609211Z",
            "FinishedAt": "2024-07-24T19:37:49.078110989Z"
        },
        "Image": "sha256:a72860cb95fd59e9c696c66441c64f18e66915fa26b249911e83c3854477ed9a",
        "ResolvConfPath": "/var/lib/docker/containers/99c12d2b58763fa1305beff10ad77745ba6d2419d90d513a74cdbf47b54204c8/resolv.conf",
        "HostnamePath": "/var/lib/docker/containers/99c12d2b58763fa1305beff10ad77745ba6d2419d90d513a74cdbf47b54204c8/hostname",
        "HostsPath": "/var/lib/docker/containers/99c12d2b58763fa1305beff10ad77745ba6d2419d90d513a74cdbf47b54204c8/hosts",
        "LogPath": "/var/lib/docker/containers/99c12d2b58763fa1305beff10ad77745ba6d2419d90d513a74cdbf47b54204c8/99c12d2b58763fa1305beff10ad77745ba6d2419d90d513a74cdbf47b54204c8-json.log",
        "Name": "/dreamy_wescoff",
        "RestartCount": 0,
```

docker container kill <id> : çalışan container'ı kapatır.

```
C:\Users\furka>docker container kill 99c12d2b5876
99c12d2b5876
```

docker container exec :. çalışan container üzerinde kod yürütülmesini sağlar.

```
C:\Users\furka>docker container exec 99c12d2b5876  echo "hello "
hello
```

```
:\Users\furka>docker container exec -it 99c12d2b5876  bash
root@99c12d2b5876:/#
```

docker container logs <id>: container log kayıtlarını getirir.

```
C:\Users\furka>docker container logs nginx
Error response from daemon: No such container: nginx

C:\Users\furka>docker container logs 99c12d2b5876,
Error response from daemon: No such container: 99c12d2b5876,

C:\Users\furka>docker container logs 99c12d2b5876
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2024/07/24 19:24:29 [notice] 1#1: using the "epoll" event method
2024/07/24 19:24:29 [notice] 1#1: nginx/1.27.0
2024/07/24 19:24:29 [notice] 1#1: built by gcc 12.2.0 (Debian 12.2.0-14)
2024/07/24 19:24:29 [notice] 1#1: OS: Linux 5.15.146.1-microsoft-standard-WSL2
2024/07/24 19:24:29 [notice] 1#1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2024/07/24 19:24:29 [notice] 1#1: start worker processes
2024/07/24 19:24:29 [notice] 1#1: start worker process 29
2024/07/24 19:24:29 [notice] 1#1: start worker process 30
2024/07/24 19:24:29 [notice] 1#1: start worker process 31
2024/07/24 19:24:29 [notice] 1#1: start worker process 32
2024/07/24 19:24:29 [notice] 1#1: start worker process 33
2024/07/24 19:24:29 [notice] 1#1: start worker process 34
2024/07/24 19:24:29 [notice] 1#1: start worker process 35
2024/07/24 19:24:29 [notice] 1#1: start worker process 36
2024/07/24 19:24:48 [notice] 1#1: signal 3 (SIGQUIT) received, shutting down
```

docker container cp <dosyayolu/dosya_adı> <container_id>:<dizin adı> : ana makinimizden container'ımıza dosya yüklememizi sağlar.

```
C:\Users\furka>docker container cp C:\Users\furka\Downloads\phpOdevi.docx 99c12d2b5876:/root
Successfully copied 70.7kB to 99c12d2b5876:/root
```

docker container stop <id>: container'ın çalışmasını durdurur.

```
C:\Users\furka>docker container stop 99c12d2b5876
99c12d2b5876
```

docker container start <id>: container'ı başlatır.

```
C:\Users\furka>docker container start 99c12d2b5876
99c12d2b5876
```

docker container pause <id> : container'ı beklemeye alır.

```
C:\Users\furka>docker container pause 99c12d2b5876
99c12d2b5876
```

docker container commit <id> : id'si verilen container'den image oluşturur.

```
C:\Users\furka>docker container commit 99c12d2b5876
sha256:fff6359f6fd985065fe219c08b7d2098f3a24eb3e63163cb85cdb86870288271
```

docker container create –it –name <container_name> <image> : image dosyasından container oluşturur.

--name= :container'a isim vermemizi sağlar

-e :container içine değişken tanımlamak ,atamak ve değiştirmemizi sağlar.

```
C:\Users\furka>docker run -e password=Siber -e password2=Vatan nginx env | grep password
password=Siber
password2=Vatan
```

--network= :container'ımızı network'e bağlamayı sağlar

--pid= : proccess id ……….

```
C:\Users\furka>docker run --rm -it --pid=host alpine
/ # whoami
root
```

-p: hangi portda çalışacağı belirtilir

```
C:\Users\furka>docker run -p 3600 nginx
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
```

		suspicious nginx 92de6f0802a'	Exited	N/A	0:3600	37 seconds ago	▶	⋮	🗑

--rm= :çalışması bittikten sonra otomatik olarak container'ın silinmesini sağlar.

```
C:\Users\furka>docker run --rm -p 3600 alpine sleep 60
```

Sleep <> = container'ın ne kadar saniye çalışacağını belirtir

```
C:\Users\furka>docker run --rm -p 3600 alpine sleep 60
```

docker netwrok create : network oluşturur.

```
C:\Users\furka>docker network create my-net2
b66feb20f02125ba412024a8666c6ea2fc8dc818dbda8d7c9129713e526f33df
```

Docker network ls : network'leri listeler.

```
C:\Users\furka>docker network ls
NETWORK ID      NAME        DRIVER      SCOPE
2795dfb19a02    bridge      bridge      local
abd4c2fed48c    host        host        local
b57e653845b9    my-net      bridge      local
b66feb20f021    my-net2     bridge      local
6889c88706ad    none        null        local
```

FROM = image 'in belirtilidği yerdir.

WORKDİR = çalışılacak dizin tanımlanır.

COPY= dosyalarımızı kopyalar.

RUN= shell komutları çalıştırılır.

EXPOSE= bağlanılacak port belirtilir.

Services= servisler tanımlanır.

APP= docerfile ,db,network bağlantılarının yapıldığı servistir.

Dockerfile: dockerfile tanımlanır.

Depends_on: bağımlılıklar tanımlanır.db vb.

Ports: container'in işlem göreceği ve ana makinemize bağlanacağı portlar belirtilir.

Networks: network belirtilir.

İmage= image belirtilir.

Environment= gerekli olan değişkenler tanımlanır.

Volumes = volume'ler tanımlanır.

Driver: network'un hangi opsiyonda çalışacağını belirtir.(brige,host …)

Version : dosya sürümüdür.

GİTHUB'A YÜKLEME

```
C:\Users\furka\OneDrive\Desktop\docker>git init
Initialized empty Git repository in C:/Users/furka/OneDrive/Desktop/docker/.git/

C:\Users\furka\OneDrive\Desktop\docker>git add .

C:\Users\furka\OneDrive\Desktop\docker>git remote add origin https://github.com/FurkanK08/Docker-Base-Codes.git
```

```
C:\Users\furka\OneDrive\Desktop\docker>git commit -m "Docker-Base-Codes"
[master (root-commit) f7ea387] Docker-Base-Codes
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 Docker.docx
```

```
C:\Users\furka\OneDrive\Desktop\docker>git push origin master
info: please complete authentication in your browser...
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 415.81 KiB | 25.99 MiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/FurkanK08/Docker-Base-Codes.git
 * [new branch]      master -> master
```