```
C:\Users\ÖAS>docker run -e MYSQL_ROOT_PASSWORD=test hello-wo
rld

Hello from Docker!
This message shows that your installation appears to be work
ing correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from th
e Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that imag
e which runs the
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 4. The Docker daemon streamed that output to the Docker cli
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To try something more ambitious, you can run an Ubuntu conta
iner with:
 $ docker run -it ubuntu bash

Share images, automate workflows, and more with a free Docke
r ID:
 https://hub.docker.com/

For more examples and ideas, visit:
 https://docs.docker.com/get-started/
```
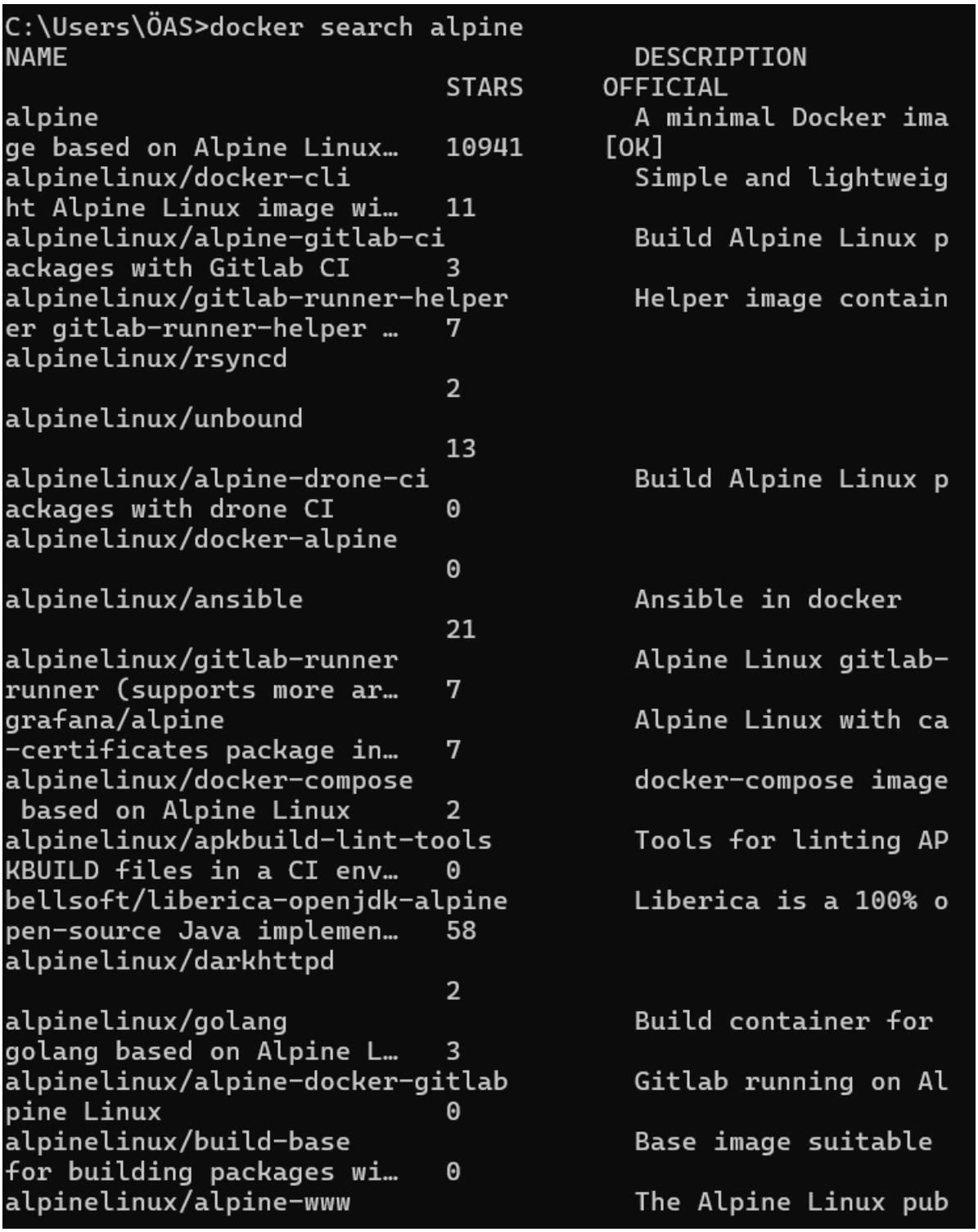

run -e MYSQL_ROOT_PASSWORD=test komutu: Docker ile bir konteyner çalıştırır ve MYSQL_ROOT_PASSWORD ortam değişkenini test olarak ayarlar.

```
C:\Users\ÖAS>docker pull hello-world
Using default tag: latest
latest: Pulling from library/hello-world
c1ec31eb5944: Pull complete
Digest: sha256:1408fec50309afee38f3535383f5b09419e6dc0925bc6
9891e79d84cc4cdcec6
Status: Downloaded newer image for hello-world:latest
docker.io/library/hello-world:latest

What's next:
    View a summary of image vulnerabilities and recommendati
ons → docker scout quickview hello-world
```

Pull komutu: İmage'ları indirir.



```
C:\Users\ÖAS>docker search alpine
NAME                                      DESCRIPTION
                          STARS     OFFICIAL
alpine                                    A minimal Docker ima
ge based on Alpine Linux…   10941     [OK]
alpinelinux/docker-cli                    Simple and lightweig
ht Alpine Linux image wi…   11
alpinelinux/alpine-gitlab-ci              Build Alpine Linux p
ackages with Gitlab CI      3
alpinelinux/gitlab-runner-helper          Helper image contain
er gitlab-runner-helper …   7
alpinelinux/rsyncd
                          2
alpinelinux/unbound
                          13
alpinelinux/alpine-drone-ci               Build Alpine Linux p
ackages with drone CI       0
alpinelinux/docker-alpine
                          0
alpinelinux/ansible                       Ansible in docker
                          21
alpinelinux/gitlab-runner                 Alpine Linux gitlab-
runner (supports more ar…   7
grafana/alpine                            Alpine Linux with ca
-certificates package in…   7
alpinelinux/docker-compose                docker-compose image
 based on Alpine Linux      2
alpinelinux/apkbuild-lint-tools           Tools for linting AP
KBUILD files in a CI env…   0
bellsoft/liberica-openjdk-alpine          Liberica is a 100% o
pen-source Java implemen…   58
alpinelinux/darkhttpd
                          2
alpinelinux/golang                        Build container for
golang based on Alpine L…   3
alpinelinux/alpine-docker-gitlab          Gitlab running on Al
pine Linux                  0
alpinelinux/build-base                    Base image suitable
for building packages wi…   0
alpinelinux/alpine-www                    The Alpine Linux pub
```

Search komutu: Ducker Hub’da public olan İmage’ları arar.

Image inspect komutu: İmage'ların hakkında bilgi verir.

```
C:\Users\ÖAS>docker run hello-world

Hello from Docker!
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```
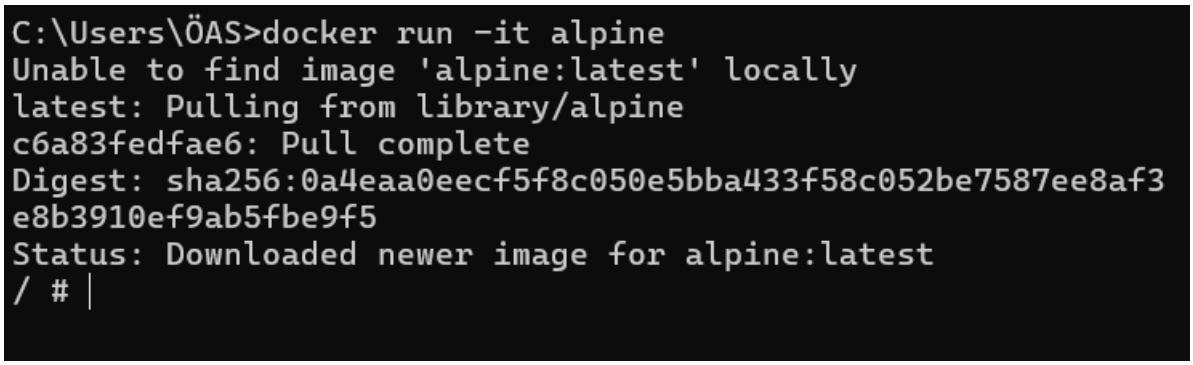

Run komutu: İmage'ları çalıştırır.



Run -it komutu: İmage'ı shelled çalıştırır.

docker-compose.yml

```yaml
version: '3'

services:
  app:
    build:
      context: .
      dockerfile: Dockerfile
    depends_on:
      - db
    ports:
      - "80:80"
    networks:
      - net

    #Dockerfile dosyasını kullanarak context kısmında belirtilen
    #dizinde docker image'ı oluşturur.Depends on, app servisi başladıktan
    #sonra veritabanının başlatılmasını sağlar.Portu 80.80 olarak ayarlar
    #web uygulaması tarayıcıdan erişilebilir hale gelir.

  db:
    image: mysql:latest
    environment:
      - MYSQL_DATABASE=yavuzlar
      - MYSQL_ROOT_PASSWORD=1
    volumes:
      - db_data:/var/lib/mysql
      - ./yavuzlar_messages.sql:/docker-entrypoint-initdb.d/yavuzlar_messages.sql
    ports:
      - "8080:3306"
    networks:
      - net
#yavuzlar adlı bir db oluşturulur kullanıcı adı root ve şifre 1 olarak
#ayarlanır. db_datayı /var/lib/mysql 'a bağlar. Veriler böylece kalıcı
#hale gelir. yavuzlar_messages.sql dosyasını, MySQL konteyneri başlatıldığında
#çalışacak şekilde ayarlar.3306 portu hostun 8080 portuna yönlendirir.
#net adlı özel bir ağa dahil olumuş olur.

networks:
 net:
  driver: bridge

volumes:
  db_data:

#network, net adlı bir özel ağ oluşturur ve bridge sürücüsünü kullanır.
#app ve db servislerinin birbirleriyle iletişim kurmasını sağlar.
#volumes, db_data ile veritabanı verileri
#konteyner durdurulsa bile kaybolmaz hale getirir.
```

Dockerfile

```
FROM php:7.4-apache
#PHP 7.4 - apache sürümünü çalıştırır

WORKDIR /var/www/html
#Çalışma dizinini ayarlar
COPY ./app .
#./app. dizininindeki dosyaları konteynerin çalışma dizinine kopyalar
RUN echo "ServerName localhost" >> /etc/apache2/apache2.conf
#Apache conf dosyasına ServerName localhost satırını ekler ve server ayarını yapar
RUN apt-get update
#Paket listesini günceller
RUN docker-php-ext-install pdo pdo_mysql
#Mysql ve PHP arasında bağlantı sağlamak için gerekli olan kütüphaneelri kurar
EXPOSE 80
#port 80i dinler
```