

Unit-2

Task-02

Update the ubuntu container, install Apache and php, then push updated on to docker hub.

Compare the size of base image and updated image after commit.

```
Terminal
PS C:\Users\narut> docker tag ubuntu ashika0804/ab2:v1.0
PS C:\Users\narut> docker login
Authenticating with existing credentials... [Username: ashika0804]

Info ->To login with a different account, run 'docker logout' followed by 'docker login'

Login Succeeded
PS C:\Users\narut> docker run -it --name ashika0804/ab2:v1.0
docker: 'docker run' requires at least 1 argument

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

See 'docker run --help' for more information
PS C:\Users\narut> docker run -it --name ab2 ashika0804/ab2:v1.0
root@2f9e857d82c8:/# apt update
Get:1 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble InRelease [256 kB]
Get:3 http://security.ubuntu.com/ubuntu noble-security/restricted amd64 Packages [3106 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
```

```
Terminal
root@2f9e857d82c8:/# apt install -y php
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  adduser apache2 apache2-bin apache2-data apache2-utils ca-certificates krb5-locales libapache2-mod-php8.3 libapr1t64 libaprutil1-dbd-sqlite3
  libaprutil1-ldap libaprutil1t64 libargon2-1 libbrotli1 libbsd0 libcurl4t64 libedit2 libexpat1 libgdbm-compat4t64 libgdbm6t64
  libgssapi-krb5-2 libicu74 libjansson4 libk5crypto3 libkeyutils1 libkrb5-3 libkrb5support0 libldap-common libldap2 liblua5.4-0 libnghttp2-14
  libperl5.38t64 libpsl5t64 librtmp1 libsasldb2 libsasldb2-modules libsasldb2-modules-db libsodium23 libsqlite3-0 libssh-4 libssl3t64 libxml2
  media-types netbase openssl perl perl-modules-5.38 php-common php8.3 php8.3-cli php8.3-common php8.3-opcache php8.3-readline psmisc
  publicsuffix ssl-cert tzdata ucf
Suggested packages:
  liblocale-gettext-perl cron quota ecryptfs-utils apache2-doc apache2-suexec-pristine | apache2-suexec-custom www-browser ufw php-pear
  gdbm-l10n krb5-doc krb5-user libsasl2-modules-gssapi-mit | libsasl2-modules-gssapi-heimdal libsasl2-modules-ldap libsasl2-modules-otp
  libsasl2-modules-sql perl-doc libterm-readline-gnu-perl | libterm-readline-perl-perl make libtap-harness-archive-perl
The following NEW packages will be installed:
  adduser apache2 apache2-bin apache2-data apache2-utils ca-certificates krb5-locales libapache2-mod-php8.3 libapr1t64 libaprutil1-dbd-sqlite3
  libaprutil1-ldap libaprutil1t64 libargon2-1 libbrotli1 libbsd0 libcurl4t64 libedit2 libexpat1 libgdbm-compat4t64 libgdbm6t64
  libgssapi-krb5-2 libicu74 libjansson4 libk5crypto3 libkeyutils1 libkrb5-3 libkrb5support0 libldap-common libldap2 liblua5.4-0 libnghttp2-14
  libperl5.38t64 libpsl5t64 librtmp1 libsasldb2 libsasldb2-modules libsasldb2-modules-db libsodium23 libsqlite3-0 libssh-4 libxml2 media-types
```

```
Terminal
PS C:\Users\narut> docker commit ab2 ashika0804/ab2:v1.0
sha256:28e750845649466220cf8ab36b7706ebdeb6325283d0fbb58012eb79aaa06992
PS C:\Users\narut> docker image
Usage: docker image COMMAND

IMAGE                                ID                                DISK USAGE  CONTENT SIZE  EXTRA
-----                                -                                -            -            -
alpine:latest                       25109184c71b                     13.1MB      3.95MB        U
ashika0804/ab2:v1.0                 28e750845649                     476MB       148MB         U
ashika0804/ap1:v1                   5c1c79cf906a                     33.6MB      10.1MB        U
ashika0804/c1:v1.1                  cd1dba651b30                     119MB       31.7MB        U
docker/welcome-to-docker:latest     c4d56c24da4f                     22.2MB      6.03MB        U
httpd:latest                        dd178595edd6                     177MB       47.6MB        U
mysql:latest                        6b18d01fb632                     1.27GB      283MB         U
nginx:latest                        c881927c4077                     240MB       65.7MB        U
ubuntu:latest                       cd1dba651b30                     119MB       31.7MB        U
PS C:\Users\narut>
```

```
Terminal
PS C:\Users\narut> docker login
Authenticating with existing credentials... [Username: ashika0804]

Info -> To login with a different account, run 'docker logout' followed by 'docker login'

Login Succeeded
PS C:\Users\narut> docker push ashika0804/ab2:v1.0
The push refers to repository [docker.io/ashika0804/ab2]
7105997aa9e7: Pushed
a3629ac5b9f4: Mounted from library/ubuntu
v1.0: digest: sha256:28e750845649466220cf8ab36b7706ebdeb6325283d0fbb58012eb79aaa06992 size: 752
PS C:\Users\narut> 
```

Step1: Run ubuntu container with given image name and tag

Step2: Authenticate

Step3: Get inside the container

Step4: Update and install the PHP and Apache image in the container

Step5: exit

Step6: commit

Step7: compare base image and updated image

Step8: Push the image to docker hub