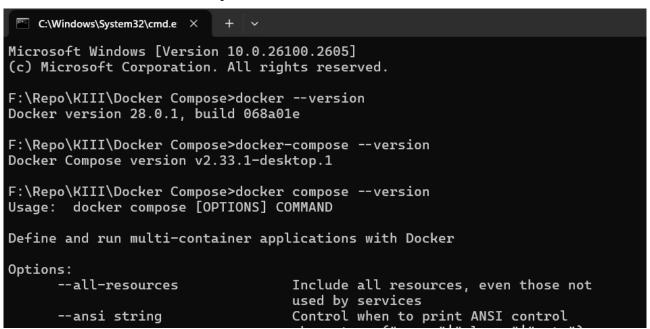
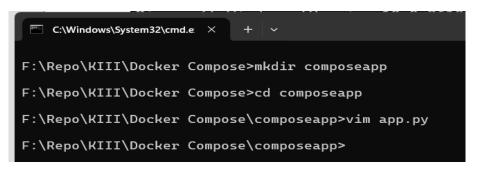
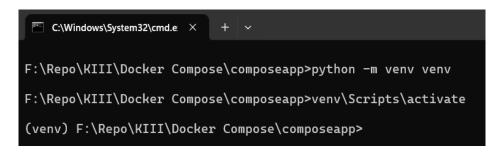
Docker Compose

1.Docker version and docker compose version



2. Creating the directory and the app.py file writing the code, and testing it locally before docker





```
from flask import Flask
from redis import Redis
import os

app = Flask(__name__)
redis = Redis(host="redis", port=6379)

@app.route('/')
def hello():
    redis.incr('hits')
    return 'Hello Docker Book reader! I have been {0} times'
    .format(redis.get('hits'))

if __name__ == "__main__":
    app.run[host="0.0.0.0", debug=True]
```

3.

```
Microsoft Windows [Version 10.0.26100.2605]
(c) Microsoft Corporation. All rights reserved.

F:\Repo\KIII\Docker Compose\composeapp>vim requirement.txt

F:\Repo\KIII\Docker Compose\composeapp>vim Dockerfile

F:\Repo\KIII\Docker Compose\composeapp>
```

4.Dockerfile

```
FROM python:3.9
LABEL maintanier="fazlibeqir@gmail.com"
ENV REFRESHED_AT 2016-06-01

ADD . /composeapp

WORKDIR /composeapp

RUN pip install -r requirement.txt
```

5.Building the dockerfile

```
C:\Windows\System32\cmd.e: × + ~
F:\Repo\KIII\Docker Compose\composeapp>docker build -t redbfs/composeapp .

[+] Building 10.8s (9/9) FINISHED

⇒ [internal] load build definition from Dockerfile
                                                                                                                                                                                                                                                               docker:desktop-linux
                                                                                                                                                                                                                                                                                                             0.1s
  ⇒ ⇒ transferring dockerfile: 208B
                                                                                                                                                                                                                                                                                                             0.0s
  ⇒ [internal] load metadata for docker.io/library/python:2.7

⇒ [internal] load .dockerignore
                                                                                                                                                                                                                                                                                                             0.8s
                                                                                                                                                                                                                                                                                                             0.0s
  ⇒ ⇒ transferring context: 2B
  → [internal] todal outed distribution of the context: 98.17kB

⇒ transferring context: 98.17kB

⇒ CACHED [1/4] FROM docker.io/library/python:2.7@sha256:cfa62318c459b1fde9e0841c619906d15ada5910d62517
                                                                                                                                                                                                                                                                                                             0.1s
                                                                                                                                                                                                                                                                                                            0.1s
          ⇒ resolve docker.io/library/python:2.7@sha256:cfa62318c459b1fde9e0841c619906d15ada5910d625176e24bf6
                                                                                                                                                                                                                                                                                                            0.1s
  → resolve docker.in/clorary/python.2.7e:

⇒ [2/4] ADD . /composeapp

⇒ [3/4] WORKDIR /composeapp

⇒ [4/4] RUN pip install -r requirement.txt

⇒ exporting to image
                                                                                                                                                                                                                                                                                                             0.7s
                                                                                                                                                                                                                                                                                                             0.3s
                                                                                                                                                                                                                                                                                                             4.8s
          ⇒ exporting layers
  \Rightarrow exporting manifest sha256:6cf8725acc8924ac87b227e3f8366a9785ac499f67c448d22c17dddacc49d2ba
  \Rightarrow \Rightarrow \texttt{exporting config sha256:15530df5207eb6b16ae857d43aaeae097a163a2da11c8706a7c97c20d14ebf3c}
                                                                                                                                                                                                                                                                                                             0.1s
  \Rightarrow exporting attestation manifest sha256:568d01d417d51ba20d40239904d62766711e3d28bbd74fa93f54ccec5b5
                                                                                                                                                                                                                                                                                                            0.4s
  \Rightarrow \Rightarrow \text{ exporting manifest list sha} 256:14d82283cf3b923b4e6e113bc412789851ca42edaef78147ad0342a18714052faber 2016 and 2016 and 2016 are also becomes a superscript of the shallowing statement of th
                                                                                                                                                                                                                                                                                                             0.2s
  \Rightarrow maming to docker.io/redbfs/composeapp:latest
                                                                                                                                                                                                                                                                                                             0.05
   ⇒ ⇒ unpacking to docker.io/redbfs/composeapp:latest
                                                                                                                                                                                                                                                                                                             0.7s
View build details: docker-desktop://dashboard/build/desktop-linux/desktop-linux/j4ma70kkzi5rde75kpyktz4e8
        warning found (use docker --debug to expand):
LegacyKeyValueFormat: "ENV key=value" should be used instead of legacy "ENV key value" format (line 3)
```

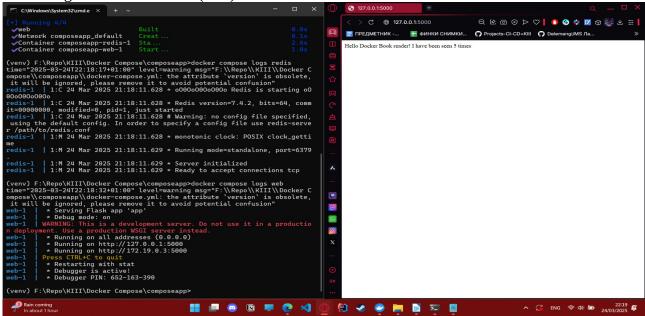
6.docker-compose.yml file

7.docker-compose up with build

8. docker-compose up with build and demonizieng

9. Watching the containe are they running

10. The logs for redis and flask (web) and the browser



11. All logs for the web app from one command

```
X
 C:\Windows\System32\cmd.e: X
(venv) F:\Repo\KIII\Docker Compose\composeapp>docker compose logs
time="2025-03-24T22:20:02+01:00" level=warning msg="F:\\Repo\\KIII\\Docker C
ompose\\composeapp\\docker-compose.yml: the attribute `version` is obsolete,
it will be ignored, please remove it to avoid potential confusion"

web-1 | * Serving Flask app 'app'

redis-1 | 1:C 24 Mar 2025 21:18:11.628 * o000o00000000 Redis is sta
         1:C 24 Mar 2025 21:18:11.628 * 000000000000 Redis is starting o0
000000000
redis-1 | 1:C 24 Mar 2025 21:18:11.628 * Redis version=7.4.2, bits=64, comm
it=00000000, modified=0, pid=1, just started
redis-1 | 1:C 24 Mar 2025 21:18:11.628 # Warning: no config file specified,
using the default config. In order to specify a config file use redis-serve
r /path/to/redis.conf
redis-1 | 1:M 24 Mar 2025 21:18:11.628 * monotonic clock: POSIX clock_getti
ne
redis-1 | 1:M 24 Mar 2025 21:18:11.629 * Running mode=standalone, port=6379
redis-1
           1:M 24 Mar 2025 21:18:11.629 * Server initialized
            1:M 24 Mar 2025 21:18:11.629 * Ready to accept connections tcp
redis-1
             * Debug mode: on
veb-1
web-1
           WARNING: This is a development server. Do not use it in a product
ion deployment. Use a production WSGI server instead.
             * Running on all addresses (0.0.0.0)
             * Running on http://127.0.0.1:5000
web-1
             * Running on http://172.19.0.3:5000
veb-1
            Press CTRL+C to quit
veb-1
             * Restarting with stat
veb-1
             * Debugger is active!
veb-1
veb-1
             * Debugger PIN: 652-163-390
            172.19.0.1 - - [24/Mar/2025 21:18:50] "GET / HTTP/1.1" 200 -
veb-1
veb-1
           172.19.0.1 - - [24/Mar/2025 21:18:51] "GET /favicon.ico HTTP/1.1"
404 -
veb-1
            172.19.0.1 - - [24/Mar/2025 21:18:53] "GET / HTTP/1.1" 200 -
            172.19.0.1 - - [24/Mar/2025 21:18:55] "GET / HTTP/1.1" 200 -
web-1
            172.19.0.1 - - [24/Mar/2025 21:18:57] "GET / HTTP/1.1" 200 -
web−1
            172.19.0.1 - - [24/Mar/2025 21:19:08] "GET / HTTP/1.1" 200 -
veb-1
           172.19.0.1 - - [24/Mar/2025 21:19:41] "GET / HTTP/1.1" 200 -
veb-1
(venv) F:\Repo\KIII\Docker Compose\composeapp>
```

12. Stoping the containers and we see they arent active in docker-compose ps

13.Removing the contaniers with rm (but we could have done the stoping and removing with docker-compose down all in one)

14. The last time checking we dont have anything running

```
(venv) F:\Repo\KIII\Docker Compose\composeapp>docker compose ps
time="2025-03-24T22:24:10+01-091:00" (level=warning msg="F:\Repo\KIII\Docker Compose\composeapp\\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

(venv) F:\Repo\KIII\Docker Compose\composeapp>
```