Qoala Devops-Assignment

1. Identifying Issues

Errors were detected through log analysis and code inspection. Key issues included:

- Incorrect configuration in 'docker-compose.yml' and 'Dockerfiles'.
- Misnamed directories, typos in port numbers, and incorrect EXPOSE statements.
- The "COPY ./html /usr/share/nginx/htmll" was giving errors even when typos were corrected.
- Docker-compose was trying to fetch images from docker hub.

2. Resolving Issues

Corrected the errors by:

- Fixing typos in Dockerfiles (e.g., EXPOSE "eight thousand" changed to EXPOSE 8000).
- Removed the "COPY ./html /usr/share/nginx/htmll" since Nginx setup is configured
 to act as a reverse proxy to the python_app service on port 8000, we might not need
 any HTML files.
- Correcting paths and filenames in `docker-compose.yml` and `nginx.conf`.
- Adjusting `nginx.conf` settings to properly proxy requests to the Python app.
- Added "build" in docker-compose.yaml to explicitly tell Docker Compose to use the local build instead of trying to pull from Docker Hub.

3. Personal Issues

- Less familiarity working with Docker-compose, took help from internet to understand about "build" parameter.
- New to AWS EC2. Deployment involved several significant error resolving such as permission issues, project files uploading in EC2 Instance, using PuTTy for the first time.