

Docker Work (Step-by-Step) & Spring Boot Project

■ All Docker Commands Executed

- ➔■ docker --version
- ➔■ cd Downloads
- ➔■ cd learnDocker
- ➔■ dir
- ➔■ docker build -t learndocker .
- ➔■ cd learnDocker
- ➔■ docker images
- ➔■ docker build -t learndocker:0.1 .
- ➔■ docker images
- ➔■ docker run -p 8080:8080 learndocker
- ➔■ docker ps
- ➔■ docker run -p 8081:8080 learndocker
- ➔■ docker ps
- ➔■ docker run -p 8081:8080 -d learndocker
- ➔■ docker logs -f 1424
- ➔■ docker logs -f 7bc5
- ➔■ docker ps
- ➔■ docker stop 7bc5
- ➔■ docker ps
- ➔■ docker images
- ➔■ docker login
- ➔■ docker tag learndocker austinn/learndocker:0.1.release
- ➔■ docker images
- ➔■ docker tag learndocker:0.1 austinnanil/learndocker:0.1.release
- ➔■ docker push austinnanil/learndocker:0.1.release
- ➔■ docker pull austinnanil/learndocker:0.1.release
- ➔■ docker images

- ➡■ docker pull mysql:latest
- ➡■ docker pull mariadb:latest
- ➡■ docker images
- ➡■ cd ..
- ➡■ doskey /history > commands_history.txt

■ **YouTube Tutorial:** <https://youtu.be/05ADPwAmiAs>

■ Dockerfile (Spring Boot Project)

```
# Use Eclipse Temurin (OpenJDK) 17
FROM eclipse-temurin:17-jdk-alpine

# Maintainer info
LABEL maintainer="g.anilkumar@clonetab.com"

# Set working directory inside container
WORKDIR /app

# Copy JAR file from target folder to /app
COPY target/learnDocker.controller-0.0.1-SNAPSHOT.jar
/app/learnDocker.controller-0.0.1-SNAPSHOT.jar

# Expose default Spring Boot port
EXPOSE 8080

# Run the application
ENTRYPOINT ["java", "-jar", "learnDocker.controller-0.0.1-SNAPSHOT.jar"]
```

■ Important Docker Commands Summary

Command	Description
docker build -t <name> .	Build Docker image from Dockerfile
docker images	List available Docker images
docker run -p 8080:8080 <image>	Run container and map ports
docker ps	Show running containers
docker stop <id>	Stop a running container
docker logs -f <id>	View live container logs

docker login	Login to Docker Hub
docker tag <src> <repo>:<tag>	Tag image for Docker Hub
docker push <repo>:<tag>	Push image to Docker Hub
docker pull <repo>:<tag>	Pull image from Docker Hub