```
1   Lab2. 수동 빌드 및 배포
2
3   1. lab 압축 파일 다운로드 및 압축해제
4     $ wget https://github.com/swacademy/CICDwithJenkins/raw/main/CICD/guestbook.zip
5       --2024-02-13 08:06:24--  https://github.com/swacademy/CICDwithJenkins/raw/main/guestbook.zip
6       Resolving github.com (github.com)... 20.200.245.247
7       Connecting to github.com (github.com)|20.200.245.247|:443... connected.
8       HTTP request sent, awaiting response... 302 Found
9       Location: https://raw.githubusercontent.com/swacademy/CICDwithJenkins/main/guestbook.zip [following]
10      --2024-02-13 08:06:24--  https://raw.githubusercontent.com/swacademy/CICDwithJenkins/main/guestbook.zip
11      Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 185.199.108.133, 185.199.109.133,
        185.199.110.133, ...
12      Connecting to raw.githubusercontent.com (raw.githubusercontent.com)|185.199.108.133|:443... connected.
13      HTTP request sent, awaiting response... 200 OK
14      Length: 236262 (231K) [application/zip]
15      Saving to: 'guestbook.zip'
16
17      100%[==============================================================>]
        236,262     --.-K/s   in 0.01s
18
19      2024-02-13 08:06:25 (16.8 MB/s) - 'guestbook.zip' saved [236262/236262]
20
21    $ sudo apt install -y unzip
22    $ unzip guestbook.zip
23      Archive:  guestbook.zip
24        inflating: .classpath
25        inflating: .gitignore
26         creating: .mvn/
27         creating: .mvn/wrapper/
28        inflating: .mvn/wrapper/maven-wrapper.jar
29        inflating: .mvn/wrapper/maven-wrapper.properties
30        inflating: .mvn/wrapper/MavenWrapperDownloader.java
31        inflating: .project
32         creating: .settings/
33        inflating: .settings/org.eclipse.core.resources.prefs
34        inflating: .settings/org.eclipse.jdt.apt.core.prefs
35        inflating: .settings/org.eclipse.jdt.core.prefs
36        inflating: .settings/org.eclipse.m2e.core.prefs
37        inflating: .settings/org.springframework.ide.eclipse.prefs
38        inflating: Dockerfile
39        inflating: HELP.md
40        inflating: mvnw
41        inflating: mvnw.cmd
42        inflating: pom.xml
43         creating: src/
44      ...
45      ...
46
47      $ chmod u+x mvnw
48      $ ./mvnw clean package
49      ...
50      ...
51      [INFO] Replacing main artifact with repackaged archive
52      [INFO] ------------------------------------------------------------------------
53      [INFO] BUILD SUCCESS
54      [INFO] ------------------------------------------------------------------------
55      [INFO] Total time:  43.621 s
56      [INFO] Finished at: 2024-01-24T12:28:43Z
57      [INFO] ------------------------------------------------------------------------
58
59      $ ls -l target/*.jar
```

```
60      -rw-rw-r-- 1 ec2-user ec2-user 25061688 Feb 13 08:15 target/guestbook-0.0.1-SNAPSHOT.jar
61
62
63  2. Docker Image 작성하기
64      $ docker image build -t guestbook .
65      $ docker image ls
66      REPOSITORY   TAG      IMAGE ID      CREATED        SIZE
67      guestbook    latest   d98cb618f1b2  11 seconds ago   497MB
68      mysql        5.7      5107333e08a8  6 weeks ago      501MB
69
70
71  3. Docker Hub에 Upload 하기
72      1)Docker Hub Login
73
74          $ docker login
75          Username:
76          Password:
77
78          Login Succeeded
79
80      2)Docker Image Tagging
81          $ docker tag guestbook {{docker hub account}}/guestbook:v1
82          $ docker image ls
83          REPOSITORY              TAG      IMAGE ID      CREATED        SIZE
84          devtrainer/guestbook    v1       d98cb618f1b2  7 minutes ago   497MB
85          guestbook               latest   d98cb618f1b2  7 minutes ago   497MB
86
87      3)Docker Image Push
88          $ docker push {{docker hub account}}/guestbook:v1
89
90
91  4. Docker Container로 방명록 웹어플리케이션 실행
92          $ docker container run ₩
93  --name=guestbookapp ₩
94  --rm ₩
95  --network=host ₩
96  -e MYSQL_IP=172.17.0.2 ₩
97  -e MYSQL_PORT=3306 ₩
98  -e MYSQL_DATABASE=guestbook ₩
99  -e MYSQL_USER=root ₩
100 -e MYSQL_PASSWORD=education ₩
101 {{docker hub account}}/guestbook:v1
102
103    .   ___          _            __ _ _
104  /₩₩ / ___'_ __ _ _(_)_ __  __ _ ₩ ₩ ₩ ₩
105 ( ( )₩__ | '_ | '_| | '_ ₩/ _` | ₩ ₩ ₩ ₩
106  ₩₩/  ___)| |_)| | | | | || (_| |  ) ) ) )
107   '  |____| .__|_| |_|_| |_₩__, | / / / /
108  =========|_|==============|___/=/_/_/_/
109  :: Spring Boot ::             (v2.6.6)
110
111 2024-01-24 13:07:12.893  INFO 1 --- [          main] c.j.guestbook.GuestbookApplication      : Starting
    GuestbookApplication v0.0.1-SNAPSHOT using Java 17.0.2 on ip-172-31-13-45 with PID 1 (/app/guestbook.jar
    started by root in /app)
112 2024-01-24 13:07:12.897  INFO 1 --- [          main] c.j.guestbook.GuestbookApplication      : No active profile set,
    falling back to 1 default profile: "default"
113 2024-01-24 13:07:14.578  INFO 1 --- [          main] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat
    initialized with port(s): 80 (http)
114 2024-01-24 13:07:14.595  INFO 1 --- [          main] o.apache.catalina.core.StandardService   : Starting service
    [Tomcat]
115 2024-01-24 13:07:14.596  INFO 1 --- [          main] org.apache.catalina.core.StandardEngine  : Starting Servlet
```

```
engine: [Apache Tomcat/9.0.60]
116  2024-01-24 13:07:14.689  INFO 1 --- [           main] o.a.c.c.C.[Tomcat].[localhost].[/]    : Initializing Spring
     embedded WebApplicationContext
117  2024-01-24 13:07:14.690  INFO 1 --- [           main] w.s.c.ServletWebServerApplicationContext : Root
     WebApplicationContext: initialization completed in 1654 ms
118  2024-01-24 13:07:15.359  INFO 1 --- [           main] o.s.b.a.w.s.WelcomePageHandlerMapping    : Adding welcome
     page template: index
119  2024-01-24 13:07:15.494  INFO 1 --- [           main] com.zaxxer.hikari.HikariDataSource       : HikariPool-1 -
     Starting...
120  2024-01-24 13:07:15.670  INFO 1 --- [           main] com.zaxxer.hikari.HikariDataSource       : HikariPool-1 - Start
     completed.
121  2024-01-24 13:07:15.852  INFO 1 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat started
     on port(s): 80 (http) with context path ''
122  2024-01-24 13:07:15.863  INFO 1 --- [           main] c.j.guestbook.GuestbookApplication       : Started
     GuestbookApplication in 3.661 seconds (JVM running for 4.246)
123
124
125  5. EC2 Instance EIP로 웹 접속 후 방명록 샘플 웹어플리케이션 동작 확인 후 컨테이너 종료
126       http://EIP
127
128       $ Ctrl + C
129
130
131  6. MySQL Workbench에서 확인
132       -guestbook > post table 확인
```