

Task : 5

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## Step 1: Creating folder and install maven

```
swetha@SWETHA: ~/devops
swetha@SWETHA:~$ mkdir devop
swetha@SWETHA:~$ cd devop
swetha@SWETHA:~/devop$ git clone https://github.com/AranganathanPrakash/spring-framework-petclinic
Cloning into 'spring-framework-petclinic'...
remote: Enumerating objects: 7351, done.
remote: Counting objects: 100% (1110/1110), done.
remote: Compressing objects: 100% (80/80), done.
remote: Total 7351 (delta 1059), reused 1030 (delta 1030), pack-reused 6241 (from 1)
Receiving objects: 100% (7351/7351), 3.12 MiB | 998.00 KiB/s, done.
Resolving deltas: 100% (3600/3600), done.
swetha@SWETHA:~/devop$ ls
spring-framework-petclinic
swetha@SWETHA:~/devop$ cd spring-framework-petclinic
swetha@SWETHA:~/devop/spring-framework-petclinic$ ls
Jenkinsfile LICENSE.txt dockerfile mvnw mvnw.cmd pom.xml readme.md src
swetha@SWETHA:~/devop/spring-framework-petclinic$ sudo apt update
[sudo] password for swetha:
Ign:1 https://pkg.jenkins.io/debian-stable binary/ InRelease
Hit:2 https://pkg.jenkins.io/debian-stable binary/ Release
Hit:3 http://archive.ubuntu.com/ubuntu noble InRelease
Hit:4 http://security.ubuntu.com/ubuntu noble-security InRelease
Hit:6 https://download.docker.com/linux/ubuntu noble InRelease
Get:7 http://archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]
Get:8 http://archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]
Fetched 252 kB in 2s (111 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
1 package can be upgraded. Run 'apt list --upgradable' to see it.
swetha@SWETHA:~/devop/spring-framework-petclinic$ sudo apt install maven -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following packages were automatically installed and are no longer required:
  bridge-utils dns-root-data dnsmasq-base ubuntu-fan
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
  libaopalliance-java libapache-pom-java libatinject-jsr330-api-java libcdi-api-java libcommons-cli-java libcommons-io-java libcommons-lang3-java
  libcommons-parent-java liberror-prone-java libgeronimo-annotation-1.3-spec-java libgeronimo-interceptor-3.0-spec-java libguava-java libguice-java
  libjansi-java libjsr305-java libmaven-parent-java libmaven-resolver-java libmaven-shared-utils-java libmaven3-core-java libplexus-cipher-java
  libplexus-classworlds-java libplexus-component-annotations-java libplexus-interpolation-java libplexus-sec-dispatcher-java libplexus-utils2-java
```

## Step 2: mvn test

```
swetha@SWETHA: ~/devops
Setting up maven (3.8.7-2) ...
update-alternatives: using /usr/share/maven/bin/mvn to provide /usr/bin/mvn (mvn) in auto mode
swetha@SWETHA:~/devop/spring-framework-petclinic$ mvn -version
Apache Maven 3.8.7
Maven home: /usr/share/maven
Java version: 17.0.14, vendor: Ubuntu, runtime: /usr/lib/jvm/java-17-openjdk-amd64
Default locale: en, platform encoding: UTF-8
OS name: "linux", version: "5.15.167.4-microsoft-standard-WSL2", arch: "amd64", family: "unix"
swetha@SWETHA:~/devop/spring-framework-petclinic$ mvn test
[INFO] Scanning for projects...
Downloading from central: https://repo.maven.apache.org/maven2/com/fasterxml/jackson/jackson-bom/2.16.1/jackson-bom-2.16.1.pom (18 kB at 34 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/com/fasterxml/jackson/jackson-bom/2.16.1/jackson-bom-2.16.1.pom (18 kB at 34 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/com/fasterxml/jackson/jackson-parent/2.16/jackson-parent-2.16.pom (6.5 kB at 65 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/com/fasterxml/jackson/jackson-parent/2.16/jackson-parent-2.16.pom (6.5 kB at 65 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/com/fasterxml/jackson/jackson-parent/2.16/jackson-parent-2.16.pom (6.5 kB at 65 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/com/fasterxml/jackson/jackson-parent/2.16/jackson-parent-2.16.pom (6.5 kB at 65 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/springframework/data/spring-data-bom/2023.1.1/spring-data-bom-2023.1.1.pom (5.5 kB at 53 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/springframework/data/spring-data-bom/2023.1.1/spring-data-bom-2023.1.1.pom (5.5 kB at 53 kB/s)
[INFO]
[INFO] -----< org.springframework.samples:spring-framework-petclinic >-----
[INFO] Building Spring Framework Petclinic 6.1.4
[INFO]
[INFO] -----[ war ]-----
Downloading from central: https://repo.maven.apache.org/maven2/org/jacoco/jacoco-maven-plugin/0.8.11/jacoco-maven-plugin-0.8.11.pom (4.2 kB at 29 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/jacoco/jacoco-maven-plugin/0.8.11/jacoco-maven-plugin-0.8.11.pom (4.2 kB at 29 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/jacoco/org.jacoco.build/0.8.11/org.jacoco.build-0.8.11.pom (44 kB at 315 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/jacoco/org.jacoco.build/0.8.11/org.jacoco.build-0.8.11.pom (44 kB at 315 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/ow2/asm/asm-bom/9.6/asm-bom-9.6.pom (3.2 kB at 27 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/ow2/asm/asm-bom/9.6/asm-bom-9.6.pom (3.2 kB at 27 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/ow2/ow2/1.5.1/ow2-1.5.1.pom (11 kB at 143 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/ow2/ow2/1.5.1/ow2-1.5.1.pom (11 kB at 143 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/jacoco/jacoco-maven-plugin/0.8.11/jacoco-maven-plugin-0.8.11.jar (57 kB at 625 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/jacoco/jacoco-maven-plugin/0.8.11/jacoco-maven-plugin-0.8.11.jar (57 kB at 625 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-enforcer-plugin/3.4.1/maven-enforcer-plugin-3.4.1.pom (7.7 kB at 152 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-enforcer-plugin/3.4.1/maven-enforcer-plugin-3.4.1.pom (7.7 kB at 152 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/enforcer/enforcer/3.4.1/enforcer-3.4.1.pom (9.1 kB at 154 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/enforcer/enforcer/3.4.1/enforcer-3.4.1.pom (9.1 kB at 154 kB/s)
Downloading from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/40/maven-parent-40.pom (49 kB at 670 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/40/maven-parent-40.pom (49 kB at 670 kB/s)
```

## Step 3: mvn clean

```
swetha@SWETHA: ~/devop/s  + -
[INFO] Results:
[INFO]
[INFO] Tests run: 62, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] -----[ war ]-----
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 02:32 min
[INFO] Finished at: 2025-03-21T09:02:21Z
[INFO]
swetha@SWETHA:~/devop/spring-framework-petclinic$ mvn clean
[INFO] Scanning for projects...
[INFO]
[INFO] -----< org.springframework.samples:spring-framework-petclinic >-----
[INFO] Building Spring Framework Petclinic 6.1.4
[INFO] -----[ war ]-----
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/2.5/maven-clean-plugin-2.5.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/2.5/maven-clean-plugin-2.5.pom (3.9 kB at 9.6 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/22/maven-plugins-22.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/22/maven-plugins-22.pom (13 kB at 174 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/21/maven-parent-21.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/21/maven-parent-21.pom (26 kB at 272 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/apache/10/apache-10.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/apache/10/apache-10.pom (15 kB at 161 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/2.5/maven-clean-plugin-2.5.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-clean-plugin/2.5/maven-clean-plugin-2.5.jar (25 kB at 277 kB/s)
[INFO]
[INFO] --- maven-clean-plugin:2.5:clean (default-clean) @ spring-framework-petclinic ---
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-plugin-api/2.0.6/maven-plugin-api-2.0.6.pom (1.5 kB at 26 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven/2.0.6/maven-2.0.6.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven/2.0.6/maven-2.0.6.pom (9.0 kB at 14 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/5/maven-parent-5.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/5/maven-parent-5.pom (15 kB at 86 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/apache/3/apache-3.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/apache/3/apache-3.pom (3.4 kB at 49 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0/plexus-utils-3.0.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/codehaus/plexus/plexus-utils/3.0/plexus-utils-3.0.pom (4.1 kB at 62 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/sonatype/spice/spice-parent/16/spice-parent-16.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/sonatype/spice/spice-parent/16/spice-parent-16.pom (8.4 kB at 118 kB/s)
```

## Step 4: mvn install

```
swetha@SWETHA: ~/devop/s  + -
[INFO]
[INFO] Total time: 2.877 s
[INFO] Finished at: 2025-03-21T09:03:19Z
[INFO]
swetha@SWETHA:~/devop/spring-framework-petclinic$ mvn install
[INFO] Scanning for projects...
[INFO]
[INFO] -----< org.springframework.samples:spring-framework-petclinic >-----
[INFO] Building Spring Framework Petclinic 6.1.4
[INFO] -----[ war ]-----
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-war-plugin/3.4.0/maven-war-plugin-3.4.0.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-war-plugin/3.4.0/maven-war-plugin-3.4.0.pom (8.4 kB at 18 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-war-plugin/3.4.0/maven-war-plugin-3.4.0.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-war-plugin/3.4.0/maven-war-plugin-3.4.0.jar (83 kB at 410 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-install-plugin/2.4/maven-install-plugin-2.4.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-install-plugin/2.4/maven-install-plugin-2.4.pom (6.4 kB at 45 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/23/maven-plugins-23.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-plugins/23/maven-plugins-23.pom (9.2 kB at 66 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/22/maven-parent-22.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/maven-parent/22/maven-parent-22.pom (30 kB at 259 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/apache/11/apache-11.pom
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/apache/11/apache-11.pom (15 kB at 158 kB/s)
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-install-plugin/2.4/maven-install-plugin-2.4.jar
Downloaded from central: https://repo.maven.apache.org/maven2/org/apache/maven/plugins/maven-install-plugin/2.4/maven-install-plugin-2.4.jar (27 kB at 130 kB/s)
[INFO]
[INFO] --- maven-enforcer-plugin:3.4.1:enforce (enforce-maven) @ spring-framework-petclinic ---
[INFO] Rule 0: org.apache.maven.enforcer.rules.version.RequireMavenVersion passed
[INFO]
[INFO] --- jacoco-maven-plugin:0.8.11:prepare-agent (prepare-agent) @ spring-framework-petclinic ---
[INFO] argLine set to -javaagent:/home/swetha/.m2/repository/org/jacoco/org.jacoco.agent/0.8.11/org.jacoco.agent-0.8.11-runtime.jar=destfile=/home/swetha/devop/spring-framework-petclinic/target/jacoco.exec
[INFO]
[INFO] --- maven-resources-plugin:3.3.1:resources (default-resources) @ spring-framework-petclinic ---
[INFO] Copying 21 resources from src/main/resources to target/classes
[INFO]
[INFO] --- maven-compiler-plugin:3.11.0:compile (default-compile) @ spring-framework-petclinic ---
[INFO] Changes detected - recompiling the module! :source
[INFO] Compiling 47 source files with javac [debug target 17] to target/classes
[INFO]
```

## Step 5: mvn package

```
swetha@SWETHA: ~/devops
[INFO] Installing /home/swetha/devop/spring-framework-petclinic/pom.xml to /home/swetha/.m2/repository/org/springframework/samples/spring-framework-petclinic/6.1.4/spring-framework-petclinic-6.1.4.pom
[INFO] BUILD SUCCESS
[INFO] Total time: 41.850 s
[INFO] Finished at: 2025-03-21T09:06:04Z
[INFO]
swetha@SWETHA:~/devop/spring-framework-petclinic$ mvn package
[INFO] Scanning for projects...
[INFO]
[INFO] -----< org.springframework.samples:spring-framework-petclinic >-----
[INFO] Building Spring Framework Petclinic 6.1.4
[INFO] -----[ war ]-----
[INFO]
[INFO] --- maven-enforcer-plugin:3.4.1:enforce (enforce-maven) @ spring-framework-petclinic ---
[INFO] Rule 0: org.apache.maven.enforcer.rules.version.RequireMavenVersion passed
[INFO]
[INFO] --- jacoco-maven-plugin:0.8.11:prepare-agent (prepare-agent) @ spring-framework-petclinic ---
[INFO] argLine set to -javaagent:/home/swetha/.m2/repository/org/jacoco/org.jacoco.agent/0.8.11/org.jacoco.agent-0.8.11-runtime.jar=destfile=/home/swetha/devop/spring-framework-petclinic/target/jacoco.exec
[INFO]
[INFO] --- maven-resources-plugin:3.3.1:resources (default-resources) @ spring-framework-petclinic ---
[INFO] Copying 21 resources from src/main/resources to target/classes
[INFO]
[INFO] --- maven-compiler-plugin:3.11.0:compile (default-compile) @ spring-framework-petclinic ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-resources-plugin:3.3.1:testResources (default-testResources) @ spring-framework-petclinic ---
[INFO] Copying 11 resources from src/test/java to target/test-classes
[INFO] Copying 1 resource from src/test/resources to target/test-classes
[INFO]
[INFO] --- maven-compiler-plugin:3.11.0:testCompile (default-testCompile) @ spring-framework-petclinic ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-surefire-plugin:3.2.3:test (default-test) @ spring-framework-petclinic ---
[INFO] Using auto detected provider org.apache.maven.surefire.junitplatform.JUnitPlatformProvider
[INFO]
[INFO] T E S T S
[INFO]
```

## Step 6 : Go to the target folder and build a docker image.

“docker build -t petclinic.”

```
swetha@SWETHA: ~/devops
[INFO] Building war: /home/swetha/devop/spring-framework-petclinic/target/petclinic.war
[INFO] BUILD SUCCESS
[INFO] Total time: 24.640 s
[INFO] Finished at: 2025-03-21T09:07:13Z
[INFO]
swetha@SWETHA:~/devop/spring-framework-petclinic$ cd target
swetha@SWETHA:~/devop/spring-framework-petclinic/target$ ls
classes          generated-test-sources  maven-archiver  petclinic      site          test-classes
generated-sources  jacoco.exec           maven-status    petclinic.war  surefire-reports
swetha@SWETHA:~/devop/spring-framework-petclinic/target$ cd ..
swetha@SWETHA:~/devop/spring-framework-petclinic$ ls
Jenkinsfile  LICENSE.txt  dockerfile  mvnw  mvnw.cmd  pom.xml  readme.md  src  target
swetha@SWETHA:~/devop/spring-framework-petclinic$ docker build -t petclinic .
unknown shorthand flag: 't' in -t

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

Run 'docker --help' for more information
swetha@SWETHA:~/devop/spring-framework-petclinic$ docker build -t petclinic .
[*] Building 120.4s (8/8) FINISHED

=> [internal] load build definition from dockerfile
=> => transferring dockerfile: 148B
=> [internal] load metadata for docker.io/library/tomcat:latest
=> [auth] library/tomcat:pull token for registry-1.docker.io
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load build context
=> => transferring context: 40.38MB
=> [1/2] FROM docker.io/library/tomcat:latest@sha256:1374a565d5122fdb42807f3a5f2d4fcc245a5e15420ff5bb5123afedc8ef769d
=> => resolve docker.io/library/tomcat:latest@sha256:1374a565d5122fdb42807f3a5f2d4fcc245a5e15420ff5bb5123afedc8ef769d
=> => sha256:a19b6847b9f1913a9d34980e0354787e49b068cddb78c70bab054c6c6fbd1660 157.59MB / 157.59MB
=> => sha256:ec01946b5efacf78477bdcfbd535c085881d83e873ae884c0cd44ea1e948d49d 2.72kB / 2.72kB
=> => sha256:88b0f1cee84c76bb84a50edacdc37fb3ee0a8706be9298dfe8ec69e5040cd 12.50kB / 12.50kB
=> => sha256:8dbbbc6af9dc7b3eecd28b35797f66551a17f035a85f020fc99a0457dd268aae8 22.94MB / 22.94MB
=> => sha256:dc1c5ea3cd9d921e35f64dce04af1c8a2cd97954281eb6af66f6067f6c2c319b 158B / 158B
=> => sha256:1374a565d5122fdb42807f3a5f2d4fcc245a5e15420ff5bb5123afedc8ef769d 6.64kB / 6.64kB
=> => sha256:91e6cc55403ad09f9aeca15ab95bf547ad0b78be2b665c486bee77161150987d 2.28kB / 2.28kB
=> => sha256:5d4660a0e9f9a61ab7c4a134c5b0c6d39f6499708092b17e6e6a619a9b83bf5 139B / 139B
=> => sha256:4f4fb708ef54461cfa82571ae0db9a8dc1e9cd5577484a6d75e68dc38e8acc1 32B / 32B
```

## Step 7 : Login docker. Create a tag and push it.

```
swetha@SWETHA: ~/devop/s
=> [2/2] COPY target/*.war /usr/local/tomcat/webapps/ROOT.war
=> exporting to image
=> exporting layers
=> writing image sha256:be3cf3ea249f1a8001592aabfbc2c9fe32fade0ce5b4ef3b46f11042c2e45100
=> naming to docker.io/library/petclinic
swetha@SWETHA:~/devop/spring-framework-petclinic$ mvn --version
Command 'mvn' not found, did you mean:
  Command 'aven' from deb survex-aven (1.4.4-1build1)
Try: sudo apt install <deb name>
swetha@SWETHA:~/devop/spring-framework-petclinic$ mvn --version
Apache Maven 3.8.7
Maven home: /usr/share/maven
Java version: 17.0.14, vendor: Ubuntu, runtime: /usr/lib/jvm/java-17-openjdk-amd64
Default locale: en, platform encoding: UTF-8
OS name: "linux", version: "5.15.167.4-microsoft-standard-WSL2", arch: "amd64", family: "unix"
swetha@SWETHA:~/devop/spring-framework-petclinic$ ls
Jenkinsfile LICENSE.txt dockerfile mvnw mvnw.cmd pom.xml readme.md src target
swetha@SWETHA:~/devop/spring-framework-petclinic$ docker login
Authenticating with existing credentials... [Username: swethar22cse]

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

Login Succeeded
swetha@SWETHA:~/devop/spring-framework-petclinic$ docker tag petclinic:latest swethar22cse/petclinic:latest
swetha@SWETHA:~/devop/spring-framework-petclinic$ docker push swethar22cse/petclinic:latest
The push refers to repository [docker.io/swethar22cse/petclinic]
767b7056d2: Pushed
5f70bf18a086: Mounted from library/tomcat
6fbd0f2a6a33: Mounted from library/tomcat
49c1bc2daeb: Mounted from library/tomcat
4e5b554b7345: Mounted from library/tomcat
39cf8ac89a5a: Mounted from library/tomcat
f8404df94899: Mounted from library/tomcat
3359bc3d7a6a: Mounted from library/tomcat
4b7c01ed0534: Mounted from library/tomcat
latest: digest: sha256:f90fde282df8bc921f894ee038aced4c382f5034a9f93d21f319ac92a843c428 size: 2413
swetha@SWETHA:~/devop/spring-framework-petclinic$ docker images
REPOSITORY          TAG         IMAGE ID      CREATED       SIZE
petclinic            latest      be3cf3ea249f  10 minutes ago  563MB
swethar22cse/petclinic latest      be3cf3ea249f  10 minutes ago  563MB
```

## Step 8 : Starting minikube.

```
swetha@SWETHA: ~/devop/s
swetha@SWETHA:~/devop/spring-framework-petclinic$ docker images
REPOSITORY          TAG         IMAGE ID      CREATED       SIZE
petclinic            latest      be3cf3ea249f  10 minutes ago  563MB
swethar22cse/petclinic latest      be3cf3ea249f  10 minutes ago  563MB
test1                latest      b1dbbbf7a6ef  25 hours ago  195MB
swethar22cse/devops-image latest      b1dbbbf7a6ef  25 hours ago  195MB
test                 latest      4af920590c27  28 hours ago  192MB
swethar22cse/index.dev latest      4af920590c27  28 hours ago  192MB
nginx                latest      53a18edff809  6 weeks ago  192MB
swethar22cse/nginx   latest      53a18edff809  6 weeks ago  192MB
ubuntu               latest      a04dc4851cbc  7 weeks ago  78.1MB
kicbase/stable       v0.0.46     e72c4cbe9b29  2 months ago  1.31GB
swetha@SWETHA:~/devop/spring-framework-petclinic$ minikube start
🐳 minikube v1.35.0 on Ubuntu 20.04 (amd64)
🔥 Using the docker driver based on existing profile
🔥 Starting "minikube" primary control-plane node in "minikube" cluster
🔥 Pulling base image v0.0.46 ...
🔥 Updating the running docker "minikube" container ...
🔥 Preparing Kubernetes v1.32.0 on Docker 27.4.1 ...
🔥 Verifying Kubernetes components...
   ▪ Using image gcr.io/k8s-minikube/storage-provisioner:v5
🌟 Enabled addons: storage-provisioner, default-storageclass
🎉 Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
swetha@SWETHA:~/devop/spring-framework-petclinic$ minikube status
minikube
type: Control Plane
host: Running
kubelet: Running
apiserver: Running
kubeconfig: Configured
swetha@SWETHA:~/devop/spring-framework-petclinic$ kubectl create deployment r3 --image=swethar22cse/petclinic --port=80
deployment.apps/r3 created
swetha@SWETHA:~/devop/spring-framework-petclinic$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
r1-98c6f9c9f-w6wpb  0/1     ErrImagePull  0           3h37m
r2-5cb4d7959d-n66xs  1/1     Running      1 (7m46s ago)  3h11m
r3-7795f668cc-kf14h  0/1     ContainerCreating  0           21s
swetha@SWETHA:~/devop/spring-framework-petclinic$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
r1-98c6f9c9f-w6wpb  0/1     ImagePullBackOff  0           3h39m
```

## Step 9 : Creating a new pod r4.

```
swetha@SWETHA: ~/devops
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
r1-98c6f9c9f-w6wpb 0/1     ImagePullBackOff 0           3h39m
r2-5cb4d7959d-n66xs 1/1     Running    1 (9m11s ago) 3h13m
r3-7795f668cc-kf14h 0/1     ContainerCreating 0           106s
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
r1-98c6f9c9f-w6wpb 0/1     ImagePullBackOff 0           3h40m
r2-5cb4d7959d-n66xs 1/1     Running    1 (10m ago) 3h14m
r3-7795f668cc-kf14h 0/1     ContainerCreating 0           3m20s
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
r1-98c6f9c9f-w6wpb 0/1     ImagePullBackOff 0           3h42m
r2-5cb4d7959d-n66xs 1/1     Running    1 (12m ago) 3h16m
r3-7795f668cc-kf14h 0/1     ImagePullBackOff 0           5m17s
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl create deployment r3 --image=swethar22cse/petclinic --port=8080
error: failed to create deployment: deployments.apps "r3" already exists
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl create deployment r4 --image=swethar22cse/petclinic --port=8080
deployment.apps/r4 created
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
r1-98c6f9c9f-w6wpb 0/1     ImagePullBackOff 0           3h43m
r2-5cb4d7959d-n66xs 1/1     Running    1 (13m ago) 3h17m
r3-7795f668cc-kf14h 0/1     ImagePullBackOff 0           5m57s
r4-77b459dff6-6f8dh 0/1     ContainerCreating 0           9s
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
r1-98c6f9c9f-w6wpb 0/1     ImagePullBackOff 0           3h45m
r2-5cb4d7959d-n66xs 1/1     Running    1 (15m ago) 3h19m
r3-7795f668cc-kf14h 1/1     Running    0           8m4s
r4-77b459dff6-6f8dh 1/1     Running    0           2m16s
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl expose deployment r4 --port=8080 --type=NodePort
service/r4 exposed
swetha@SWETHA:~/devops/spring-framework-petclinic$ minikube service r4
-----
| NAMESPACE | NAME | TARGET PORT | URL |
|-----|-----|-----|-----|
| default | r4 | 8080 | http://192.168.49.2:30300 |
|-----|-----|-----|-----|
* Starting tunnel for service r4.
```

## Step 10 : Run the pod r4 using the command ‘minikube service r4’

```
swetha@SWETHA: ~/devops/s
r2-5cb4d7959d-n66xs 1/1     Running    1 (10m ago) 3h14m
r3-7795f668cc-kf14h 0/1     ContainerCreating 0           3m20s
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
r1-98c6f9c9f-w6wpb 0/1     ImagePullBackOff 0           3h42m
r2-5cb4d7959d-n66xs 1/1     Running    1 (12m ago) 3h16m
r3-7795f668cc-kf14h 0/1     ImagePullBackOff 0           5m17s
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl create deployment r3 --image=swethar22cse/petclinic --port=8080
error: failed to create deployment: deployments.apps "r3" already exists
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl create deployment r4 --image=swethar22cse/petclinic --port=8080
deployment.apps/r4 created
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
r1-98c6f9c9f-w6wpb 0/1     ImagePullBackOff 0           3h43m
r2-5cb4d7959d-n66xs 1/1     Running    1 (13m ago) 3h17m
r3-7795f668cc-kf14h 0/1     ImagePullBackOff 0           5m57s
r4-77b459dff6-6f8dh 0/1     ContainerCreating 0           9s
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl get pods
NAME          READY   STATUS    RESTARTS   AGE
r1-98c6f9c9f-w6wpb 0/1     ImagePullBackOff 0           3h45m
r2-5cb4d7959d-n66xs 1/1     Running    1 (15m ago) 3h19m
r3-7795f668cc-kf14h 1/1     Running    0           8m4s
r4-77b459dff6-6f8dh 1/1     Running    0           2m16s
swetha@SWETHA:~/devops/spring-framework-petclinic$ kubectl expose deployment r4 --port=8080 --type=NodePort
service/r4 exposed
swetha@SWETHA:~/devops/spring-framework-petclinic$ minikube service r4
-----
| NAMESPACE | NAME | TARGET PORT | URL |
|-----|-----|-----|-----|
| default | r4 | 8080 | http://192.168.49.2:30300 |
|-----|-----|-----|-----|
* Starting tunnel for service r4.
-----
| NAMESPACE | NAME | TARGET PORT | URL |
|-----|-----|-----|-----|
| default | r4 | 8080 | http://127.0.0.1:44607 |
|-----|-----|-----|-----|
* Opening service default/r4 in default browser...
* http://127.0.0.1:44607
! Because you are using a Docker driver on linux, the terminal needs to be open to run it.
```

# OUTPUT:

