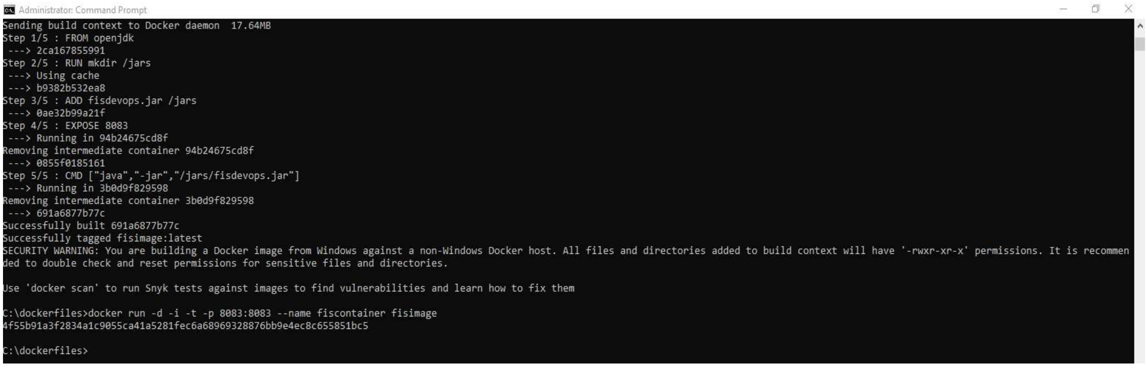
Create a jenkins project using Docker Images and Container

1) Used jar file and build a docker image in command



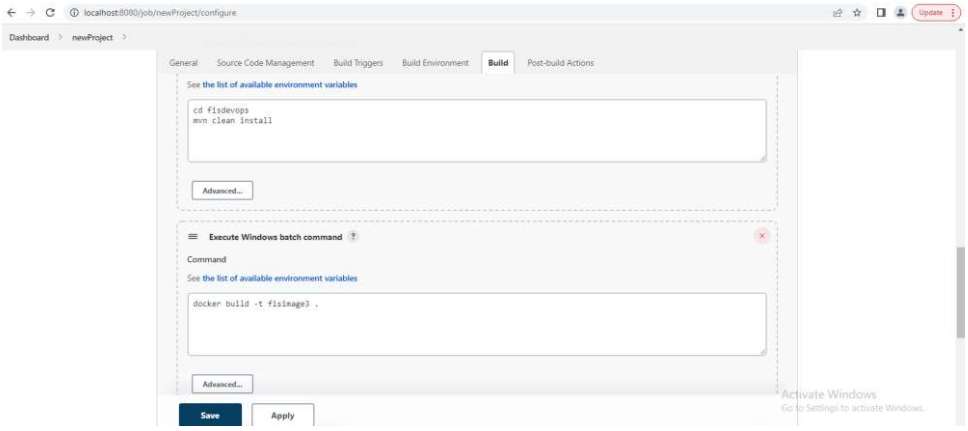
```
Sending build context to Docker daemon  17.64MB
Step 1/5 : FROM openjdk
 ---> 2ca167855991
Step 2/5 : RUN mkdir /jars
 ---> Using cache
 ---> b9382b532ea8
Step 3/5 : ADD fisdevops.jar /jars
 ---> 0ae32b99a21f
Step 4/5 : EXPOSE 8083
 ---> Running in 94b24675cd8f
Removing intermediate container 94b24675cd8f
 ---> 0855f0185161
Step 5/5 : CMD ["java","-jar","/jars/fisdevops.jar"]
 ---> Running in 3b0d9f829598
Removing intermediate container 3b0d9f829598
 ---> 691a6877b77c
Successfully built 691a6877b77c
Successfully tagged fisimage:latest
SECURITY WARNING: You are building a Docker image from Windows against a non-Windows Docker host. All files and directories added to build context will have '-rwxr-xr-x' permissions. It is recommen
ded to double check and reset permissions for sensitive files and directories.

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them

C:\dockerfiles>docker run -d -i -t -p 8083:8083 --name fiscontainer fisimage
4f55b91a3f2834a1c9055ca41a5281fec6a68969328876bb9e4ec8c655851bc5

C:\dockerfiles>
```

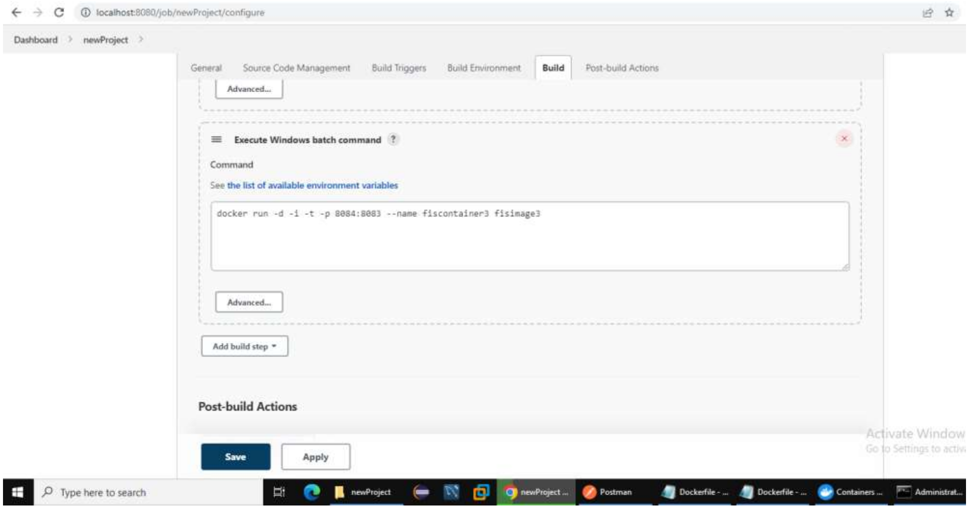
2) Created jenkins project and written mvn command:


localhost:8080/job/newProject/configure
Update
Dashboard
newProject
General
Source Code Management
Build Triggers
Build Environment
Build
Post-build Actions
See the list of available environment variables
Advanced...
Execute Windows batch command
Command
See the list of available environment variables
Advanced...
Save
Apply
Activate Windows
Go to Settings to activate Windows.

```
cd fisdevops
mvn clean install
```

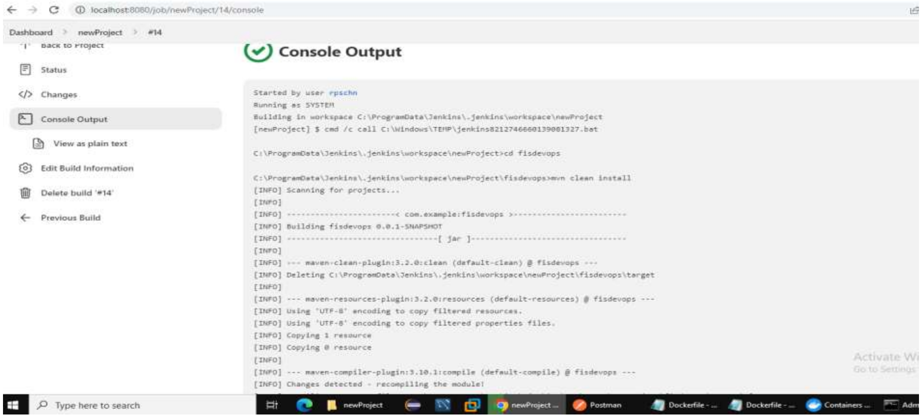
```
docker build -t fisimage3 .
```

3) Command to build the image and container:



```
docker run -d -i -t -p 8084:8083 --name fiscontainer3 fisimage3
```

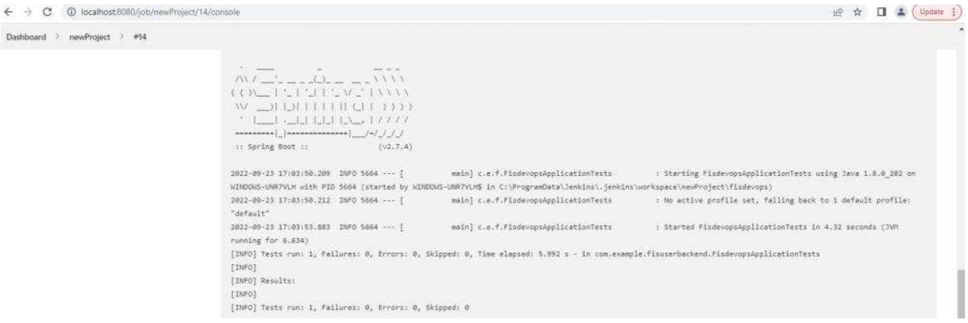
4) Console output of project:



```
Started by user rpschn
Running as SYSTEM
Building in workspace C:\ProgramData\Jenkins\.jenkins\workspace\newProject
[newProject] $ cmd /c call C:\Windows\TEMP\jenkins8212746660139081327.bat

C:\ProgramData\Jenkins\.jenkins\workspace\newProject>cd fisdevops

C:\ProgramData\Jenkins\.jenkins\workspace\newProject\fisdevops>mvn clean install
[INFO] Scanning for projects...
[INFO]
[INFO] ----------------------< com.example:fisdevops >-----------------------
[INFO] Building fisdevops 0.0.1-SNAPSHOT
[INFO] --------------------------------[ jar ]---------------------------------
[INFO]
[INFO] --- maven-clean-plugin:3.2.0:clean (default-clean) @ fisdevops ---
[INFO] Deleting C:\ProgramData\Jenkins\.jenkins\workspace\newProject\fisdevops\target
[INFO]
[INFO] --- maven-resources-plugin:3.2.0:resources (default-resources) @ fisdevops ---
[INFO] Using 'UTF-8' encoding to copy filtered resources.
[INFO] Using 'UTF-8' encoding to copy filtered properties files.
[INFO] Copying 1 resource
[INFO] Copying 0 resource
[INFO]
[INFO] --- maven-compiler-plugin:3.10.1:compile (default-compile) @ fisdevops ---
[INFO] Changes detected - recompiling the module!
```



```
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( ( )\___ | '_ | '_| | '_ \/ _` | \ \ \ \
 \\/  ___)| |_)| | | | | || (_| |  ) ) ) )
  '  |____| .__|_| |_|_| |_\__, | / / / /
 =========|_|==============|___/=/_/_/_/
 :: Spring Boot ::                (v2.7.4)

2022-09-23 17:03:50.209  INFO 5664 --- [           main] c.e.f.FisdevopsApplicationTests          : Starting FisdevopsApplicationTests using Java 1.8.0_202 on
WINDOWS-UNR7VLH with PID 5664 (started by WINDOWS-UNR7VLH$ in C:\ProgramData\Jenkins\.jenkins\workspace\newProject\fisdevops)
2022-09-23 17:03:50.212  INFO 5664 --- [           main] c.e.f.FisdevopsApplicationTests          : No active profile set, falling back to 1 default profile:
"default"
2022-09-23 17:03:53.883  INFO 5664 --- [           main] c.e.f.FisdevopsApplicationTests          : Started FisdevopsApplicationTests in 4.32 seconds (JVM
running for 6.634)
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 5.992 s - in com.example.fisuserbackend.FisdevopsApplicationTests
[INFO]
[INFO] Results:
[INFO]
[INFO] Tests run: 1, Failures: 0, Errors: 0, Skipped: 0
```
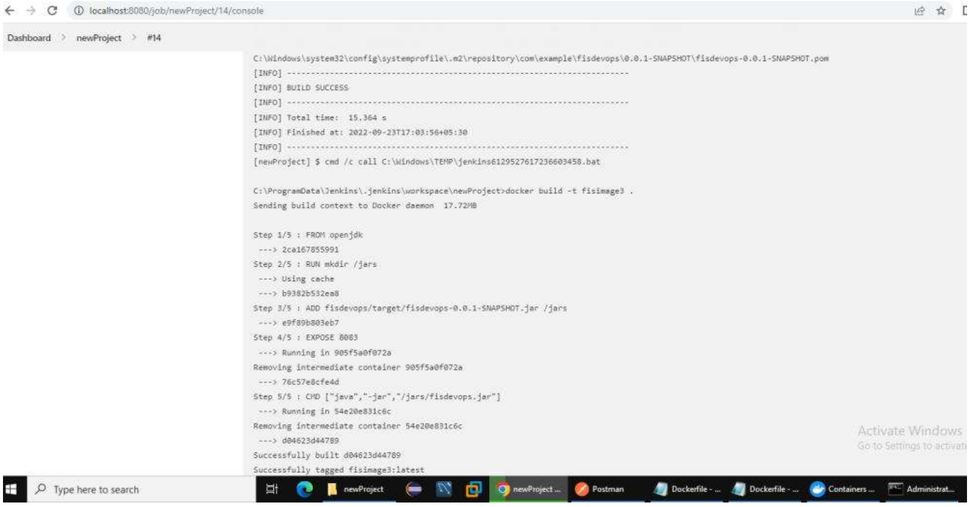
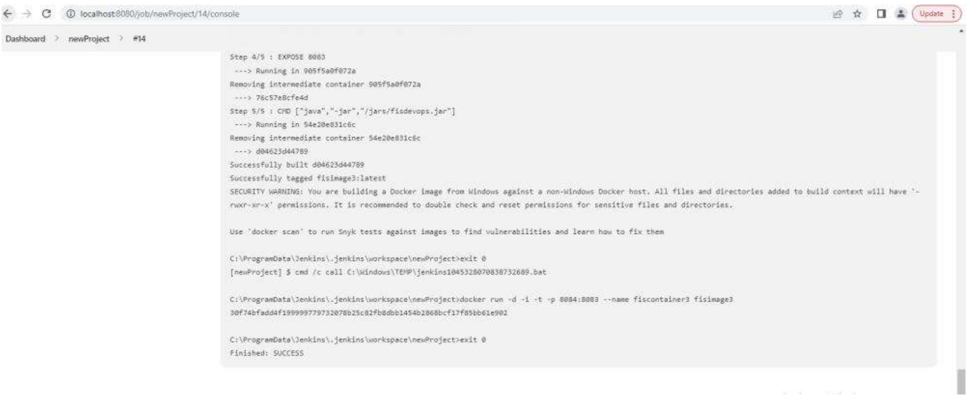



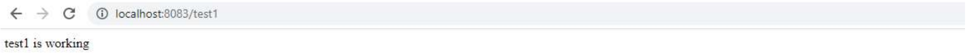
```
C:\Windows\system32\config\systemprofile\.m2\repository\com\example\fisdevops\0.0.1-SNAPSHOT\fisdevops-0.0.1-SNAPSHOT.pom
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  15.364 s
[INFO] Finished at: 2022-09-23T17:03:56+05:30
[INFO] ------------------------------------------------------------------------
[newProject] $ cmd /c call C:\Windows\TEMP\jenkins6129527617236603458.bat

C:\ProgramData\Jenkins\.jenkins\workspace\newProject>docker build -t fisimage3 .
Sending build context to Docker daemon  17.72MB

Step 1/5 : FROM openjdk
 ---> 2ca167855991
Step 2/5 : RUN mkdir /jars
 ---> Using cache
 ---> b9382b532ea8
Step 3/5 : ADD fisdevops/target/fisdevops-0.0.1-SNAPSHOT.jar /jars
 ---> e9f89b803eb7
Step 4/5 : EXPOSE 8083
 ---> Running in 905f5a0f072a
Removing intermediate container 905f5a0f072a
 ---> 76c57e8cfe4d
Step 5/5 : CMD ["java","-jar","/jars/fisdevops.jar"]
 ---> Running in 54e20e831c6c
Removing intermediate container 54e20e831c6c
 ---> d04623d44789
Successfully built d04623d44789
Successfully tagged fisimage3:latest
```



localhost:8080/job/newProject/14/console
Update
Dashboard > newProject > #14

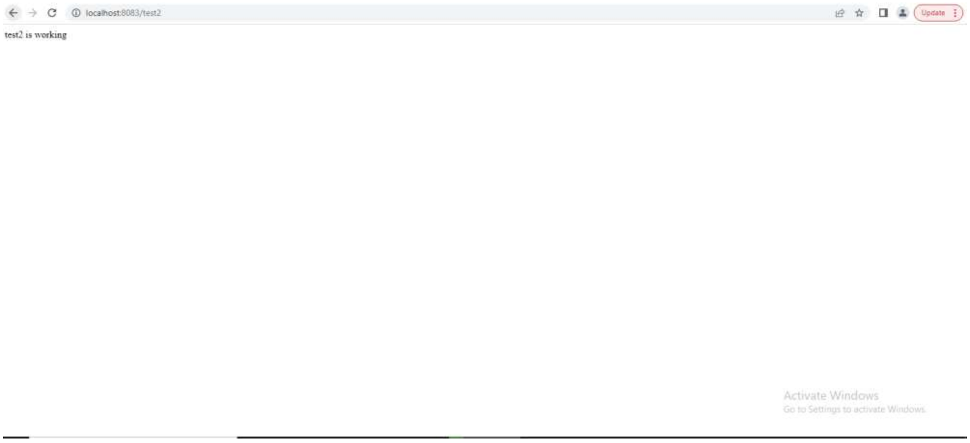
```
Step 4/5 : EXPOSE 8083
 ---> Running in 905f5a0f072a
Removing intermediate container 905f5a0f072a
 ---> 76c57e8cfe4d
Step 5/5 : CMD ["java","-jar","/jars/fisdevops.jar"]
 ---> Running in 54e20e831c6c
Removing intermediate container 54e20e831c6c
 ---> d04623d44789
Successfully built d04623d44789
Successfully tagged fisimage3:latest
SECURITY WARNING: You are building a Docker image from Windows against a non-Windows Docker host. All files and directories added to build context will have '-
rwxr-xr-x' permissions. It is recommended to double check and reset permissions for sensitive files and directories.

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them

C:\ProgramData\Jenkins\.jenkins\workspace\newProject>exit 0
[newProject] $ cmd /c call C:\Windows\TEMP\jenkins10453280708387326889.bat

C:\ProgramData\Jenkins\.jenkins\workspace\newProject>docker run -d -i -t -p 8084:8083 --name fiscontainer3 fisimage3
30f74bfadd4f19999977973207 8b25c82fb8dbb1454b2868bcf17f85bb61e902

C:\ProgramData\Jenkins\.jenkins\workspace\newProject>exit 0
Finished: SUCCESS
```

5) Output of test1 on localserver



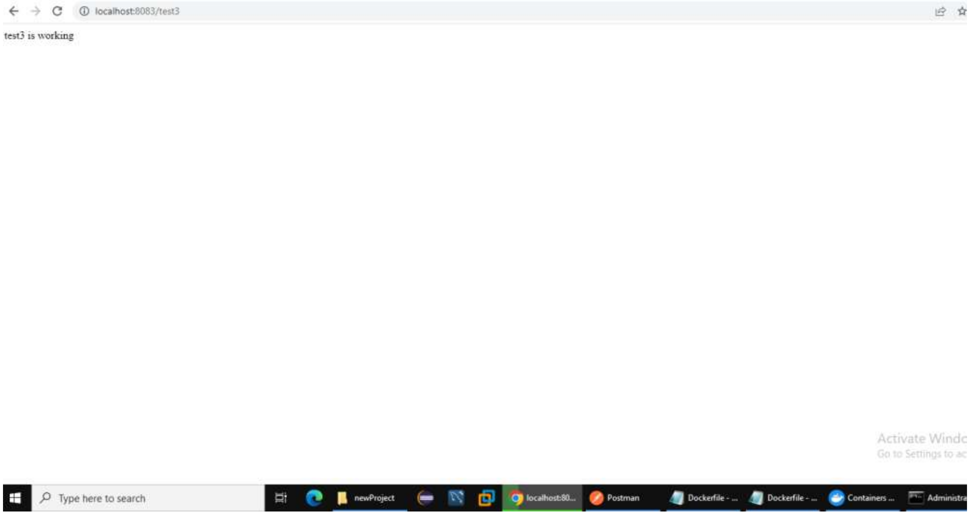
test1 is working

6) Output of test2 on localserver:



test2 is working

7) Output of tes31 on localserver:



test3 is working