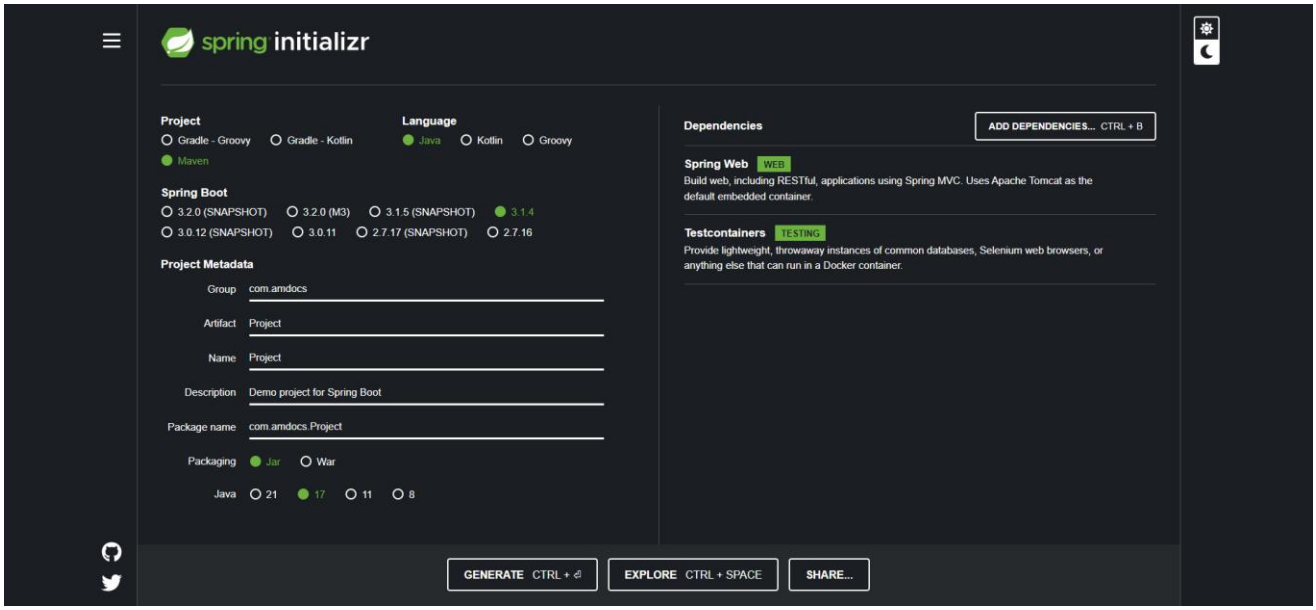
Name: Swarali Dandekar

Employee ID: 201323

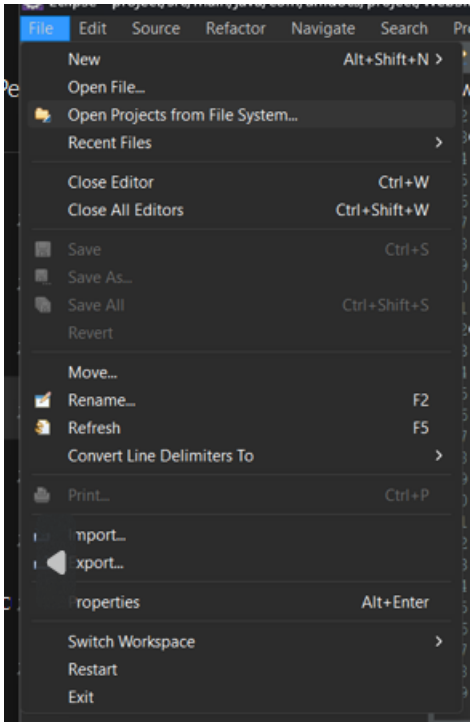
Project Topic: Automation of Khadi Naturals Website using Selenium and creating a Docker image

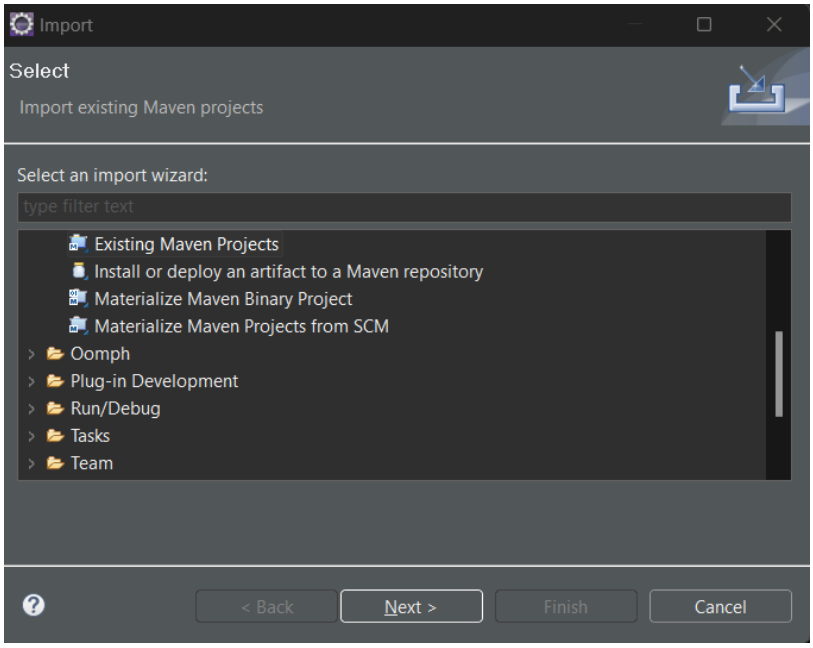
1. Selenium Project

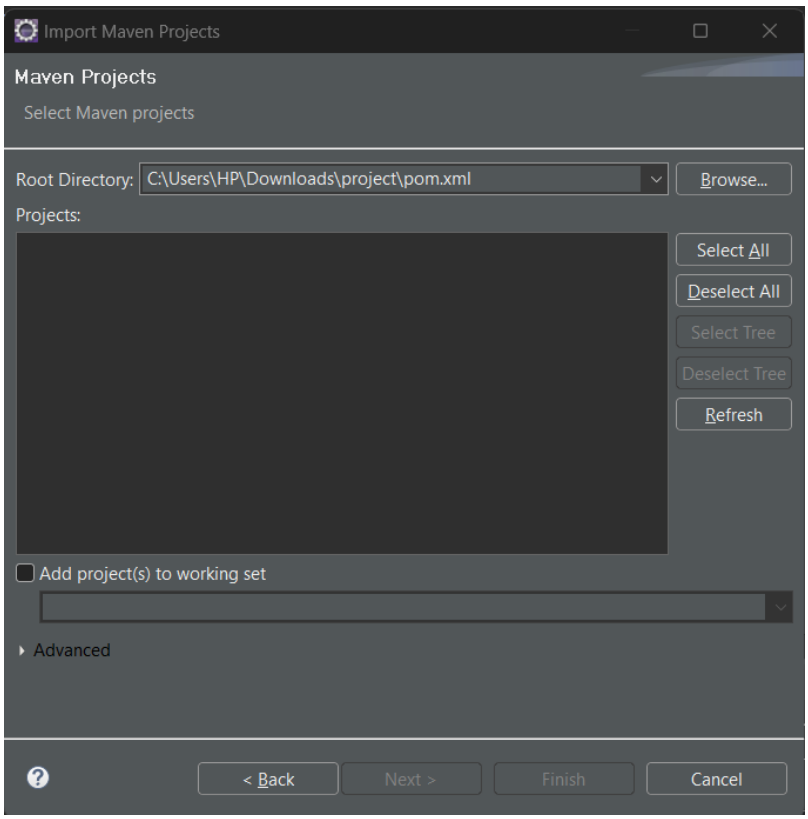
Create a spring project and generate a zip file and extract into the folder.



Import the extracted zip file.







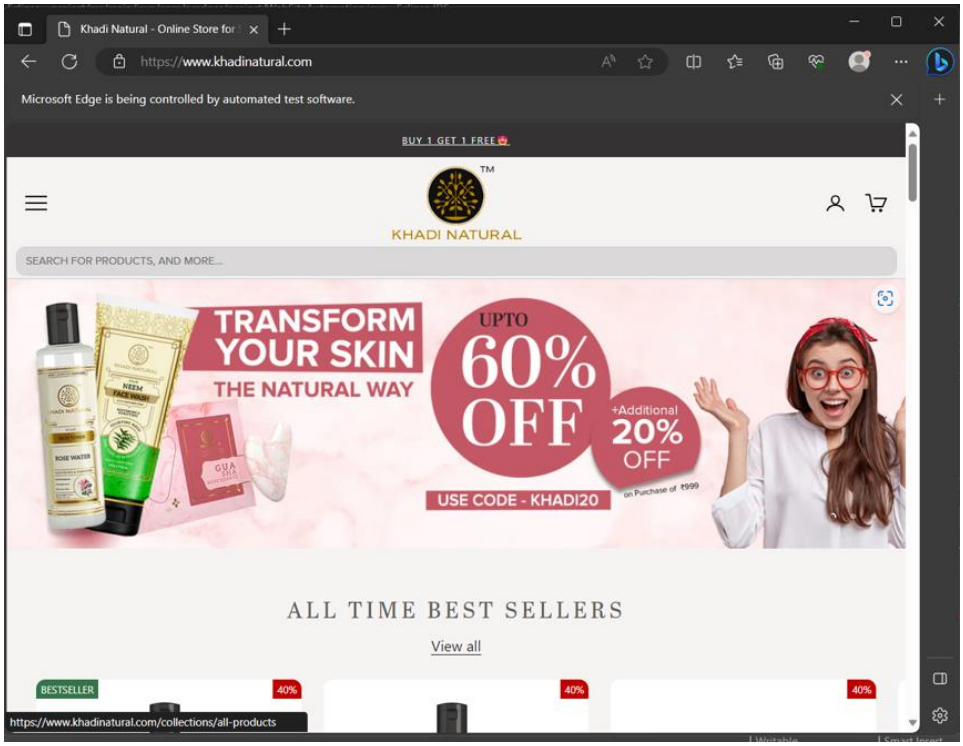
Add dependency in pom.xml:

```
<!-- https://mvnrepository.com/artifact/org.testng/testng -->
<dependency>
    <groupId>org.testng</groupId>
    <artifactId>testng</artifactId>
```

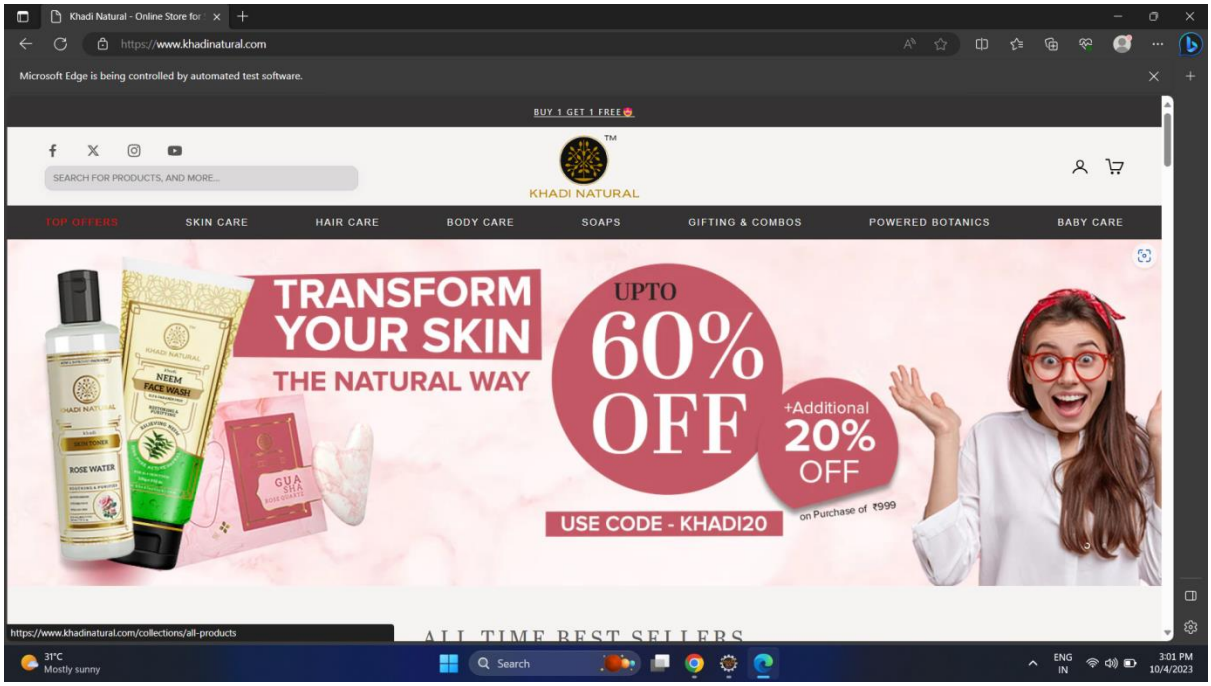
```
    <version>7.8.0</version>
    <scope>test</scope>
</dependency>
<!-- https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-java
-->
<dependency>
    <groupId>org.seleniumhq.selenium</groupId>
    <artifactId>selenium-java</artifactId>
    <version>4.12.0</version>
</dependency>

<!-- https://mvnrepository.com/artifact/io.github.bonigarcia/webdrivermanager -
->
<dependency>
    <groupId>io.github.bonigarcia</groupId>
    <artifactId>webdrivermanager</artifactId>
    <version>5.5.3</version>
</dependency>
```

Code:

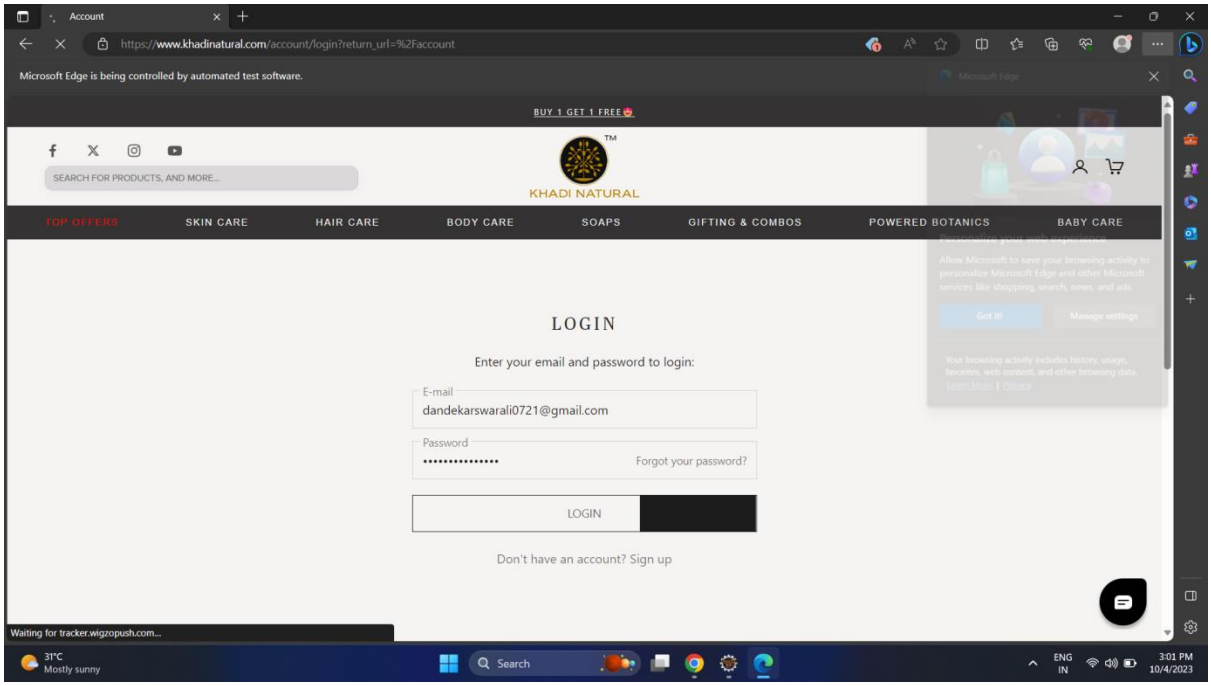
```
dr=new EdgeDriver();

                 //load the website
                dr.get("https://www.khadinatural.com/");
                //maximize the window
```

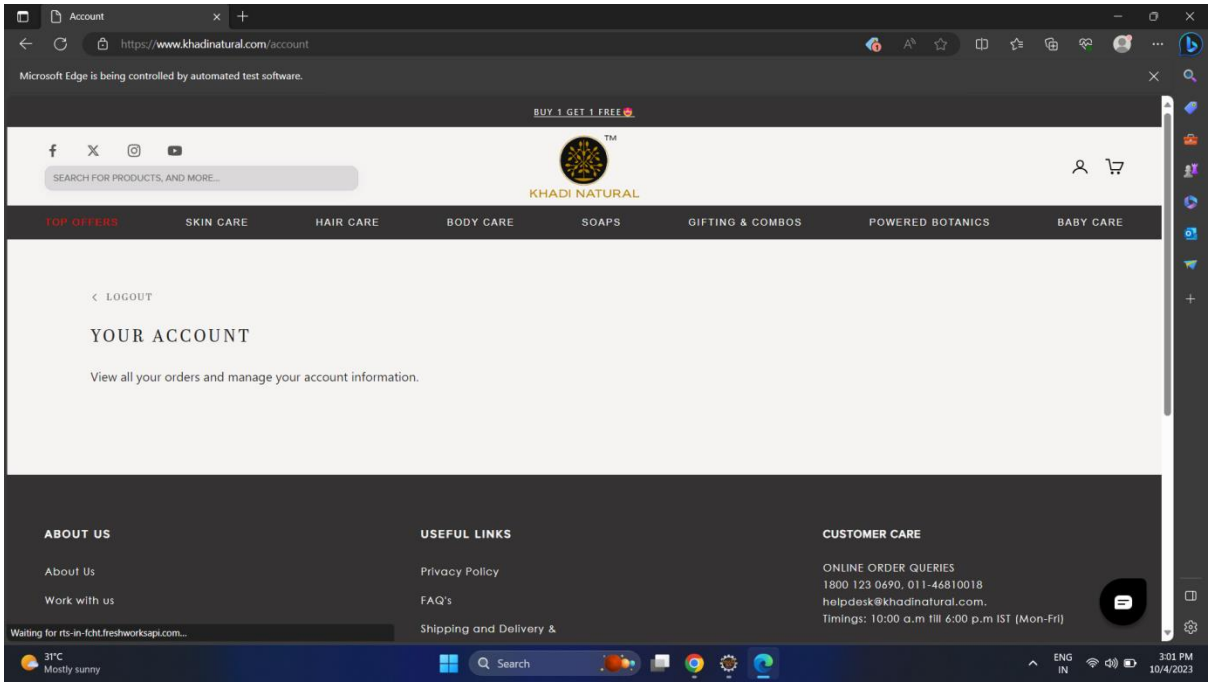



```
dr.manage().window().maximize();

                //Thread.sleep()-refers to the wait of action for the specified time
                Thread.sleep(4000);
```



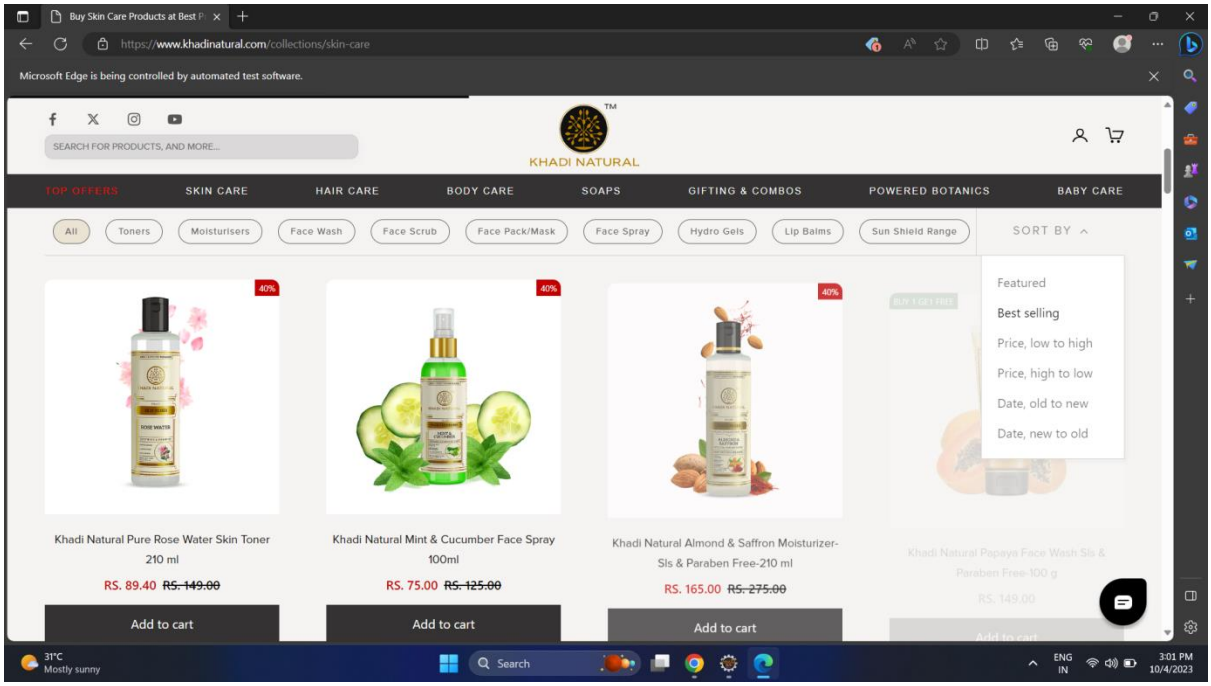

```
//login into the account
                WebElement login=dr.findElement(By.xpath("//*[@id=\"shopify-section-sections--20758378807618__header\"]/height-observer/x-header/nav[2]/a[1]"));
                login.click();
                Thread.sleep(5000);
                WebElement mail=dr.findElement(By.xpath("//*[@id=\"input-template--20758378119490__main--customeremail\"]"));
                mail.sendKeys("dandekarswarali0721@gmail.com");
                WebElement pass=dr.findElement(By.xpath("//*[@id=\"input-template--20758378119490__main--customerpassword\"]"));
                pass.sendKeys("Khadinatural@07");

        dr.findElement(By.xpath("//*[@id=\"customer_login\"]/button")).click();
                Thread.sleep(3000);
```

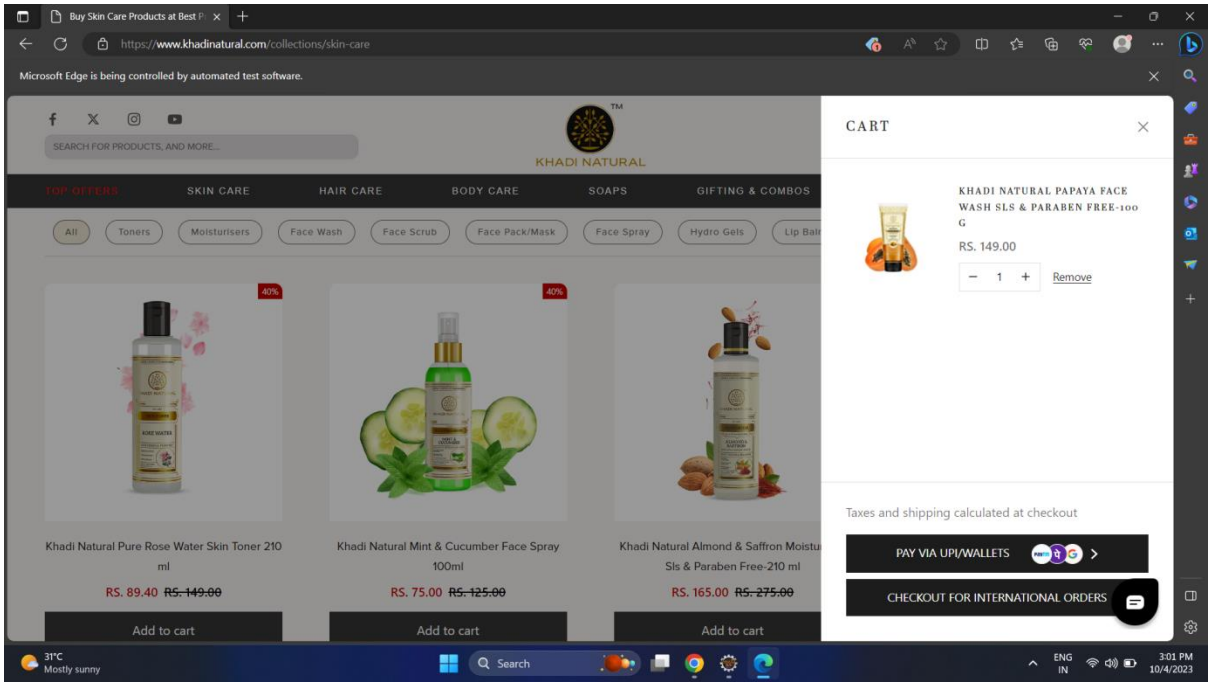




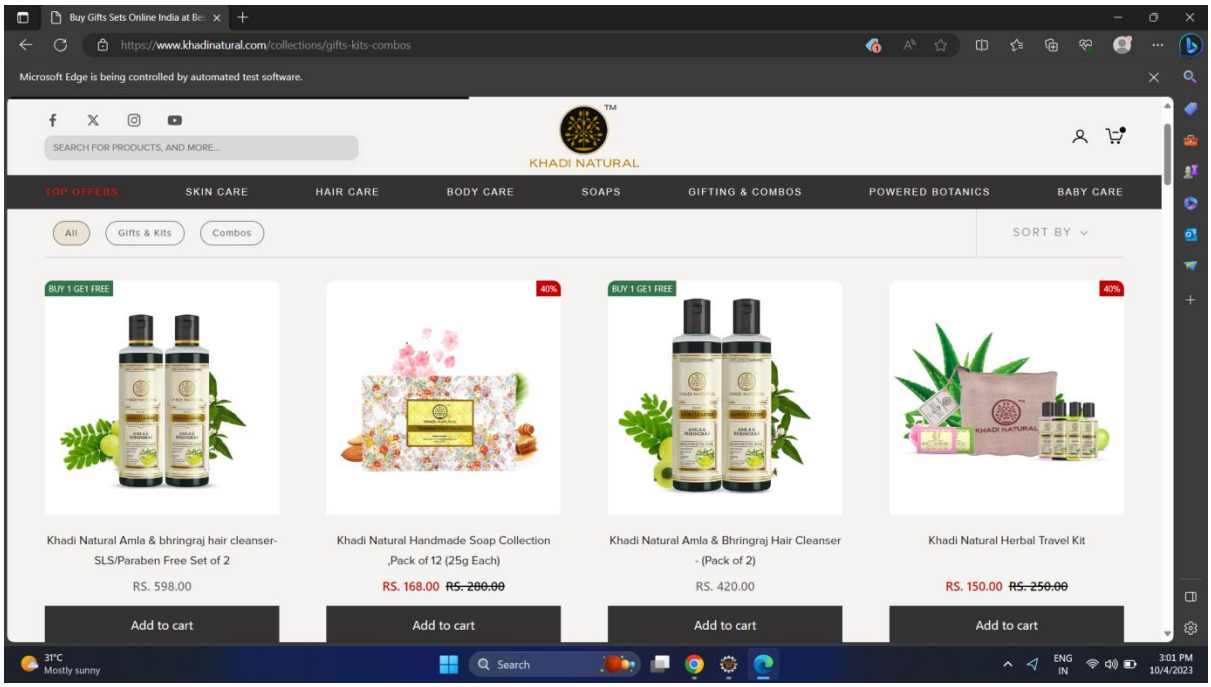

```
//navigation to skincare and adding product to cart
                dr.navigate().to("https://www.khadinatural.com/collections/skin-care");
                dr.findElement(By.xpath("//*[@id=\"shopify-section-template--20758376841538__main\"]/div/div/height-observer/div/div[1]/button")).click();

            dr.findElement(By.xpath("//*[@id=\"product_form_6722639953971\"]/button")).click();
```

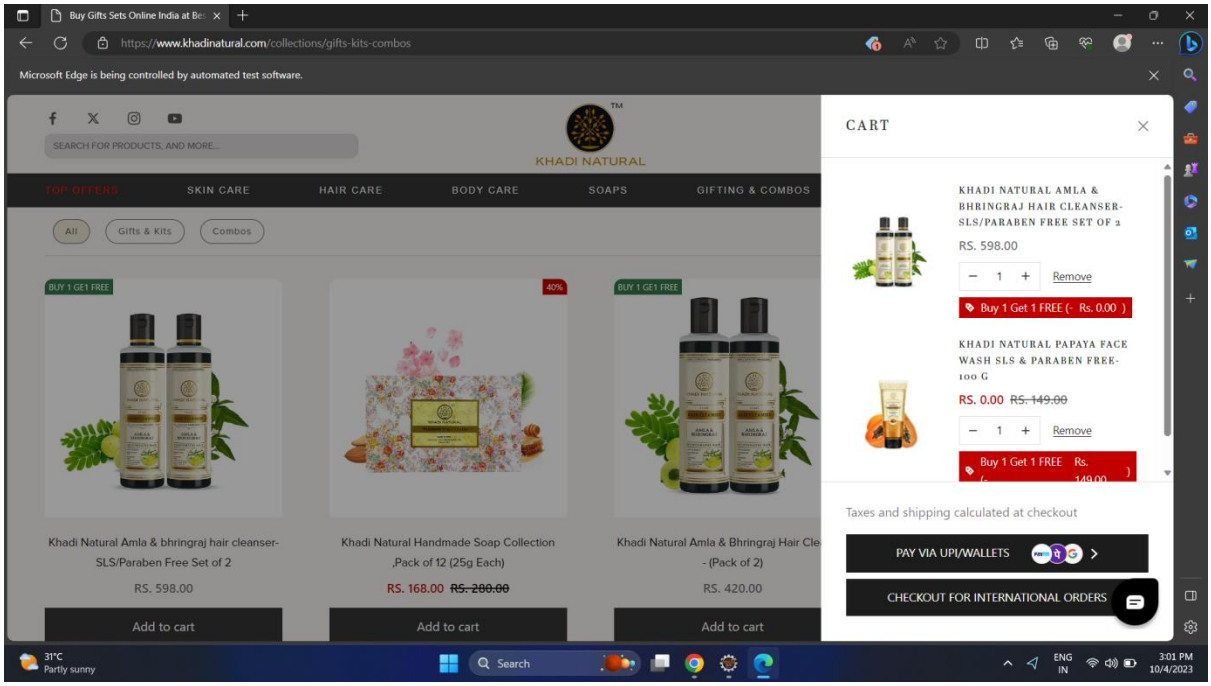
```
Thread.sleep(3000);
```



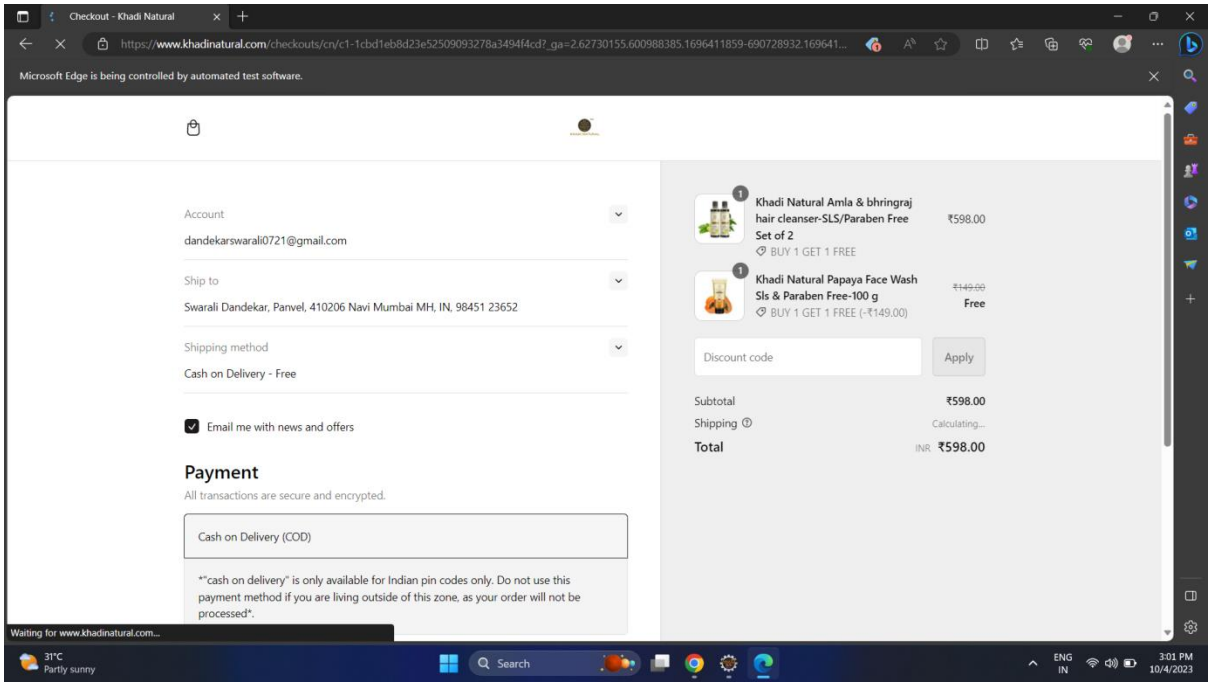


```
//navigating to gifts/combos and adding product to cart
                dr.navigate().to("https://www.khadinatural.com/collections/gifts-kits-combos");
                dr.findElement(By.cssSelector("#product_form_6722591260723 > button")).click();
                Thread.sleep(3000);
dr.findElement(By.xpath("//*[@id=\"cart-drawer\"]/form/div[2]/button[2]")).click();
                Thread.sleep(3000);
```

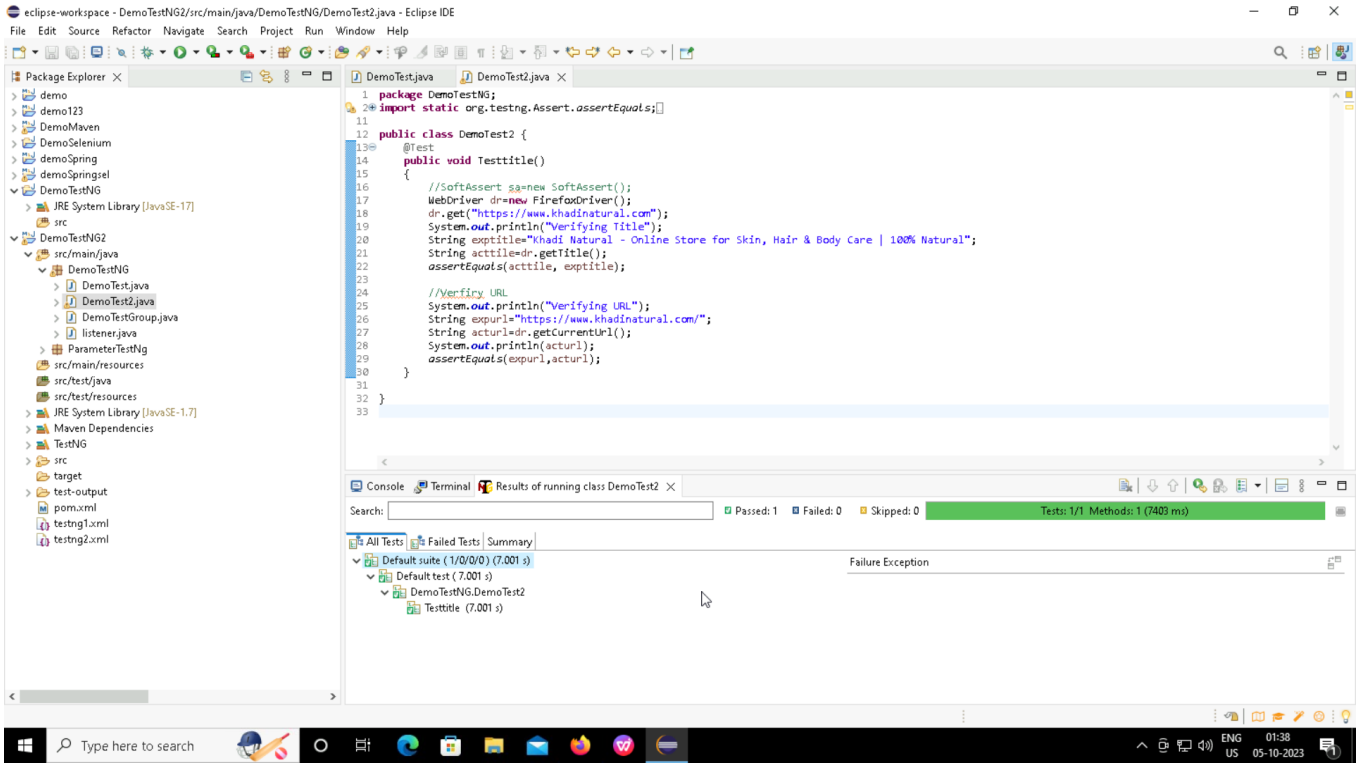




```
//procedure to add address for shipping-(once added it gets saved no need to add again)

//                dr.findElement(By.xpath("//*[@id=\"shipping-address1\"]")).sendKeys("Panvel");
//
        dr.findElement(By.xpath("//*[@id=\"TextField3\"]")).sendKeys("Navi Mumbai");
//            Select s=new Select(dr.findElement(By.xpath("//*[@id=\"Select1\"]")));
//                s.selectByVisibleText("Maharashtra");
//
        dr.findElement(By.xpath("//*[@id=\"TextField4\"]")).sendKeys("410206");
//
        dr.findElement(By.xpath("//*[@id=\"TextField5\"]")).sendKeys("9845123652");
                //dr.findElement(By.xpath("//*[@id=\"pay-button-container\"]/div/div/button")).click();
```



Code for testing:


eclipse-workspace - DemoTestNG2/src/main/java/DemoTestNG/DemoTest2.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Package Explorer
demo
demo123
DemoMaven
DemoSelenium
demoSpring
demoSpringsel
DemoTestNG
JRE System Library [JavaSE-17]
src
DemoTestNG2
src/main/java
DemoTestNG
DemoTest.java
DemoTest2.java
DemoTestGroup.java
listener.java
ParameterTestNg
src/main/resources
src/test/java
src/test/resources
JRE System Library [JavaSE-1.7]
Maven Dependencies
TestNG
src
target
test-output
pom.xml
testng1.xml
testng2.xml
DemoTest.java
DemoTest2.java
1 package DemoTestNG;
2 import static org.testng.Assert.assertEquals;
11
12 public class DemoTest2 {
13 @Test
14 public void Testtitle()
15 {
16 //SoftAssert sa=new SoftAssert();
17 WebDriver dr=new FirefoxDriver();
18 dr.get("https://www.khadinatural.com");
19 System.out.println("Verifying Title");
20 String exptitle="Khadi Natural - Online Store for Skin, Hair & Body Care | 100% Natural";
21 String acttile=dr.getTitle();
22 assertEquals(acttile, exptitle);
23
24 //Verfiry URL
25 System.out.println("Verifying URL");
26 String expurl="https://www.khadinatural.com/";
27 String acturl=dr.getCurrentUrl();
28 System.out.println(acturl);
29 assertEquals(expurl,acturl);
30 }
31
32 }
33
Console Terminal Results of running class DemoTest2
Search:
Passed: 1 Failed: 0 Skipped: 0
Tests: 1/1 Methods: 1 (7403 ms)
All Tests Failed Tests Summary
Default suite (1/0/0/0) (7.001 s)
Default test (7.001 s)
DemoTestNG.DemoTest2
Testtitle (7.001 s)
Failure Exception
Type here to search
ENG
US
01:38
05-10-2023

2. Docker Project:

Create a simple spring boot project ; run it and create a docker conatainer and image of the same.

```
package com.example.demo;

import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.RestController;

@RestController
public class DockerProject {
	@GetMapping("/get")
	public String show1()
	{
		return "Docker-Docker is an open platform for developing, shipping, and running applications.";
	}
	@GetMapping("/in")
	public String show2()
	{
		return "This is a Docker Project which show how to dockerize a simple spring boot project.";
	}

}
```

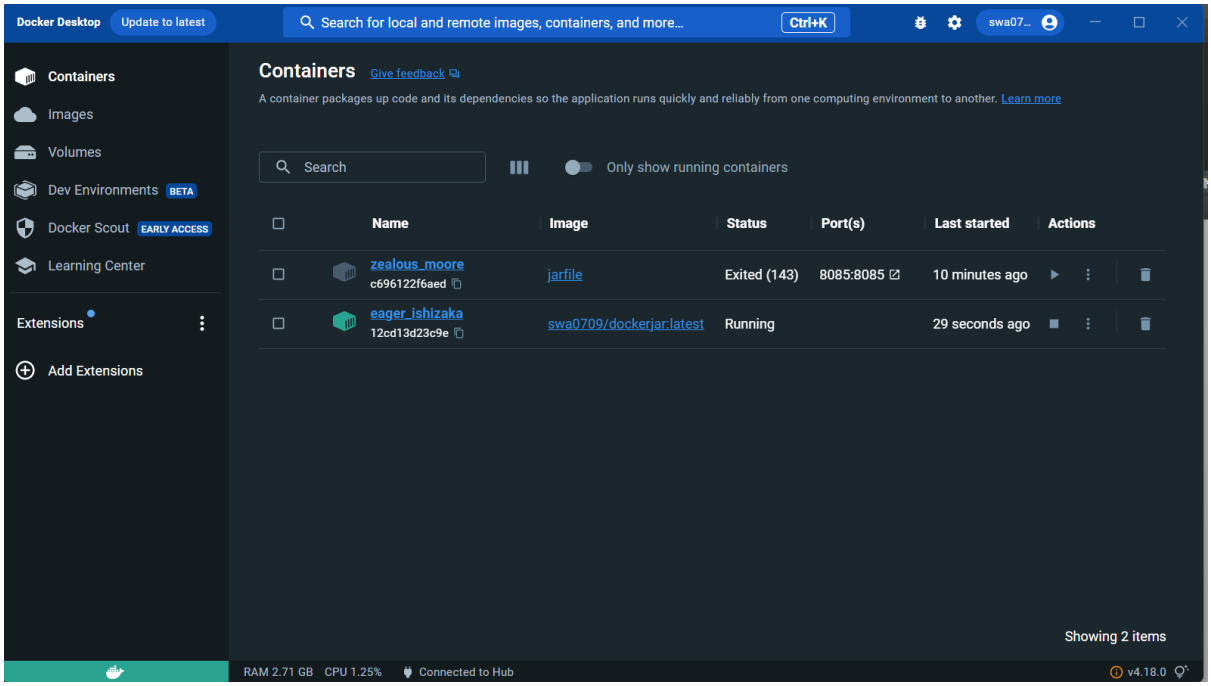
```
FROM openjdk:17
EXPOSE 8085
ADD target/jarfile.jar jarfile.jar
ENTRYPOINT ["java","-jar","/jarfile.jar"]
```

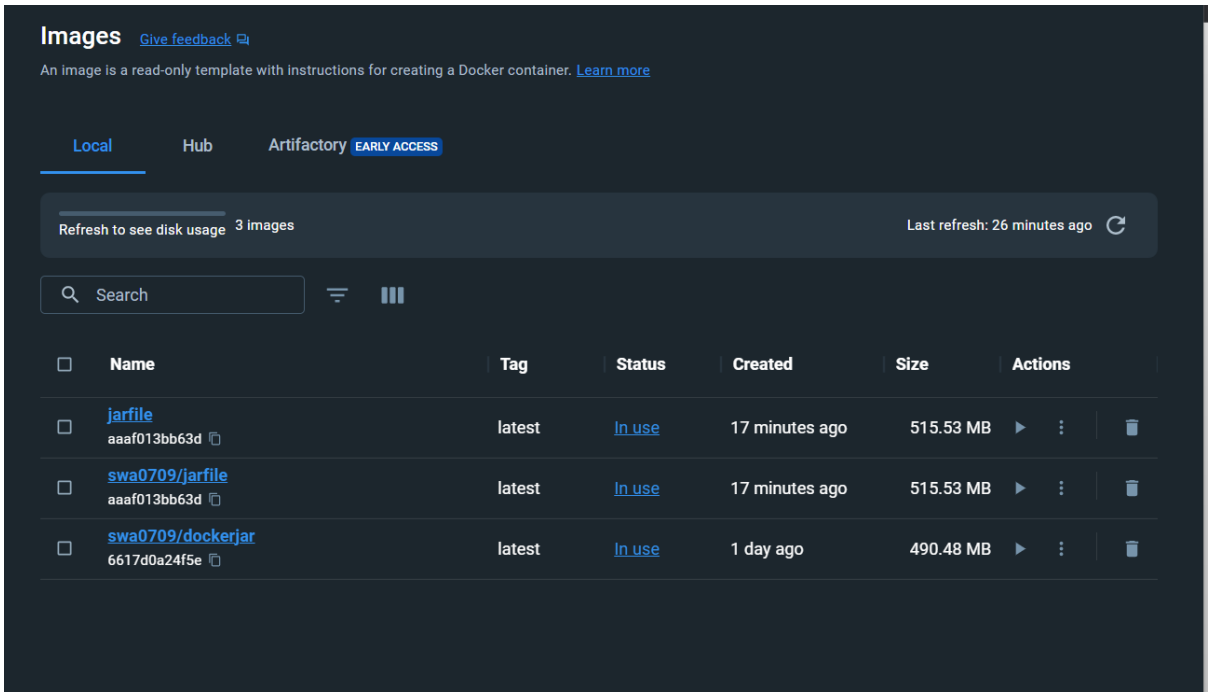
```
C:\Users\HP\Downloads\demo>docker build -t jarfile:latest .
[+] Building 72.0s (8/8) FINISHED
 => [internal] load build definition from Dockerfile                                                                                                0.1s
 => => transferring dockerfile: 146B                                                                                                                0.0s
 => [internal] load .dockerignore                                                                                                                   0.0s
 => => transferring context: 2B                                                                                                                     0.0s
 => [internal] load metadata for docker.io/library/openjdk:17                                                                                       3.8s
 => [auth] library/openjdk:pull token for registry-1.docker.io                                                                                      0.0s
 => [internal] load build context                                                                                                                   7.1s
 => => transferring context: 44.08MB                                                                                                                7.1s
 => [1/2] FROM docker.io/library/openjdk:17@sha256:528707081fdb9562eb819128a9f85ae7fe000e2fbaeaf9f87662e7b3f38cb7d8                                 67.2s
 => => resolve docker.io/library/openjdk:17@sha256:528707081fdb9562eb819128a9f85ae7fe000e2fbaeaf9f87662e7b3f38cb7d8                                  0.1s
 => => sha256:528707081fdb9562eb819128a9f85ae7fe000e2fbaeaf9f87662e7b3f38cb7d8 1.04kB / 1.04kB                                                       0.0s
 => => sha256:98f0304b3a3b7c12ce641177a99d1f3be56f532473a528fda38d53d519cafb13 954B / 954B                                                           0.0s
 => => sha256:5e28ba2b4cdb3a7c3bd0ee2e635a5f6481682b77eabf8b51a17ea8bfe1c05697 4.45kB / 4.45kB                                                       0.0s
 => => sha256:38a980f2cc8accf69c23deae6743d42a87eb34a54f02396f3fcfd7c2d06e2c5b 42.11MB / 42.11MB                                                    18.3s
 => => sha256:de849f1cfbe60b1c06a1db83a3129ab0ea397c4852b98e3e4300b12ee57ba111 13.53MB / 13.53MB                                                    9.5s
 => => sha256:a7203ca35e75e068651c9907d659adc721dba823441b78639fde66fc988f042f 187.53MB / 187.53MB                                                 63.0s
 => => extracting sha256:38a980f2cc8accf69c23deae6743d42a87eb34a54f02396f3fcfd7c2d06e2c5b                                                            1.8s
 => => extracting sha256:de849f1cfbe60b1c06a1db83a3129ab0ea397c4852b98e3e4300b12ee57ba111                                                           0.6s
 => => extracting sha256:a7203ca35e75e068651c9907d659adc721dba823441b78639fde66fc988f042f                                                           4.0s
 => [2/2] ADD target/jarfile.jar jarfile.jar                                                                                                        0.4s
 => exporting to image                                                                                                                              0.4s
 => => exporting layers                                                                                                                             0.3s
 => => writing image sha256:aaaf013bb63defb4bf4656f55aca2a7f867a205c0e361d14c51bad75db859abc                                                        0.0s
 => => naming to docker.io/library/jarfile:latest                                                                                                   0.0s

C:\Users\HP\Downloads\demo>
```

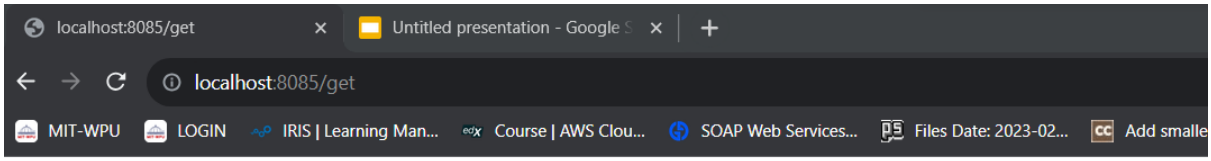
```
C:\Users\HP\Downloads\demo>docker images
REPOSITORY          TAG       IMAGE ID       CREATED          SIZE
jarfile             latest    aaaf013bb63d   12 minutes ago   516MB
swa0709/jarfile     latest    aaaf013bb63d   12 minutes ago   516MB
```

```
C:\Users\HP\Downloads\demo>docker run -p 8085:8085 jarfile

  .   ____          _            __ _ _
 /\\ / ___'_ __ _ _(_)_ __  __ _ \ \ \ \
( ( )\___ | '_ | '_| | '_ \/ _` | \ \ \ \
 \\/  ___)| |_)| | | | | || (_| |  ) ) ) )
  '  |____| .__|_| |_|_| |_\__, | / / / /
 =========|_|==============|___/=/_/_/_/
 :: Spring Boot ::                (v3.1.4)

2023-10-04T18:33:56.834Z  INFO 1 --- [           main] com.example.demo.DemoApplication         : Starting DemoApplication v0.0.1-SNAPSHOT using Java
17.0.2 with PID 1 (/jarfile.jar started by root in /)
2023-10-04T18:33:56.851Z  INFO 1 --- [           main] com.example.demo.DemoApplication         : No active profile set, falling back to 1 default pro
file: "default"
2023-10-04T18:33:59.487Z  INFO 1 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat initialized with port(s): 8085 (http)
2023-10-04T18:33:59.511Z  INFO 1 --- [           main] o.apache.catalina.core.StandardService   : Starting service [Tomcat]
2023-10-04T18:33:59.511Z  INFO 1 --- [           main] o.apache.catalina.core.StandardEngine    : Starting Servlet engine: [Apache Tomcat/10.1.13]
2023-10-04T18:33:59.769Z  INFO 1 --- [           main] o.a.c.c.C.[Tomcat].[localhost].[/]       : Initializing Spring embedded WebApplicationContext
2023-10-04T18:33:59.776Z  INFO 1 --- [           main] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed
 in 2539 ms
2023-10-04T18:34:00.948Z  INFO 1 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat started on port(s): 8085 (http) with context
path ''
2023-10-04T18:34:00.988Z  INFO 1 --- [           main] com.example.demo.DemoApplication         : Started DemoApplication in 5.378 seconds (process ru
nning for 7.014)
```

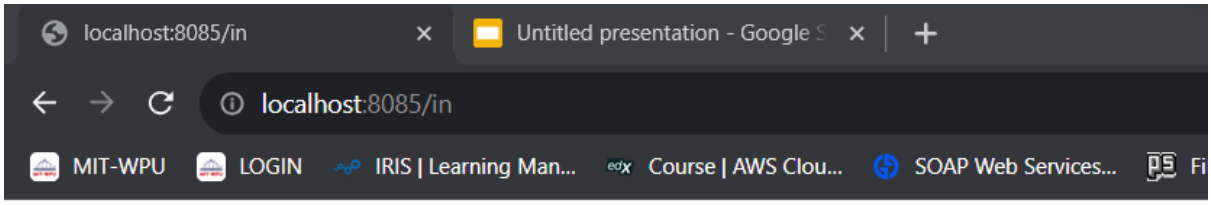
```
C:\Users\HP\Downloads\demo>docker push swa0709/jarfile
Using default tag: latest
The push refers to repository [docker.io/swa0709/jarfile]
74e4f0a4d1b8: Pushed
dc9fa3d8b576: Mounted from library/openjdk
27ee19dc88f2: Mounted from library/openjdk
c8dd97366670: Preparing
unauthorized: incorrect username or password

C:\Users\HP\Downloads\demo>docker run -p 8085:8085 jarfile
```


Docker Desktop
Update to latest
Search for local and remote images, containers, and more...
Ctrl+K
swa07...
Containers
Images
Volumes
Dev Environments
BETA
Docker Scout
EARLY ACCESS
Learning Center
Extensions
Add Extensions
Containers
Give feedback
A container packages up code and its dependencies so the application runs quickly and reliably from one computing environment to another. Learn more
Search
Only show running containers
Name
Image
Status
Port(s)
Last started
Actions
zealous_moore
c696122f6aed
jarfile
Exited (143)
8085:8085
10 minutes ago
eager_ishizaka
12cd13d23c9e
swa0709/dockerjar:latest
Running
29 seconds ago
Showing 2 items
RAM 2.71 GB
CPU 1.25%
Connected to Hub
v4.18.0


Images
Give feedback
An image is a read-only template with instructions for creating a Docker container. Learn more
Local
Hub
Artifactory
EARLY ACCESS
Refresh to see disk usage
3 images
Last refresh: 26 minutes ago
Search
Name
Tag
Status
Created
Size
Actions
jarfile
aaaf013bb63d
latest
In use
17 minutes ago
515.53 MB
swa0709/jarfile
aaaf013bb63d
latest
In use
17 minutes ago
515.53 MB
swa0709/dockerjar
6617d0a24f5e
latest
In use
1 day ago
490.48 MB



Docker-Docker is an open platform for developing, shipping, and running applications.



This is a Docker Project which show how to dockerize a simple spring boot project.