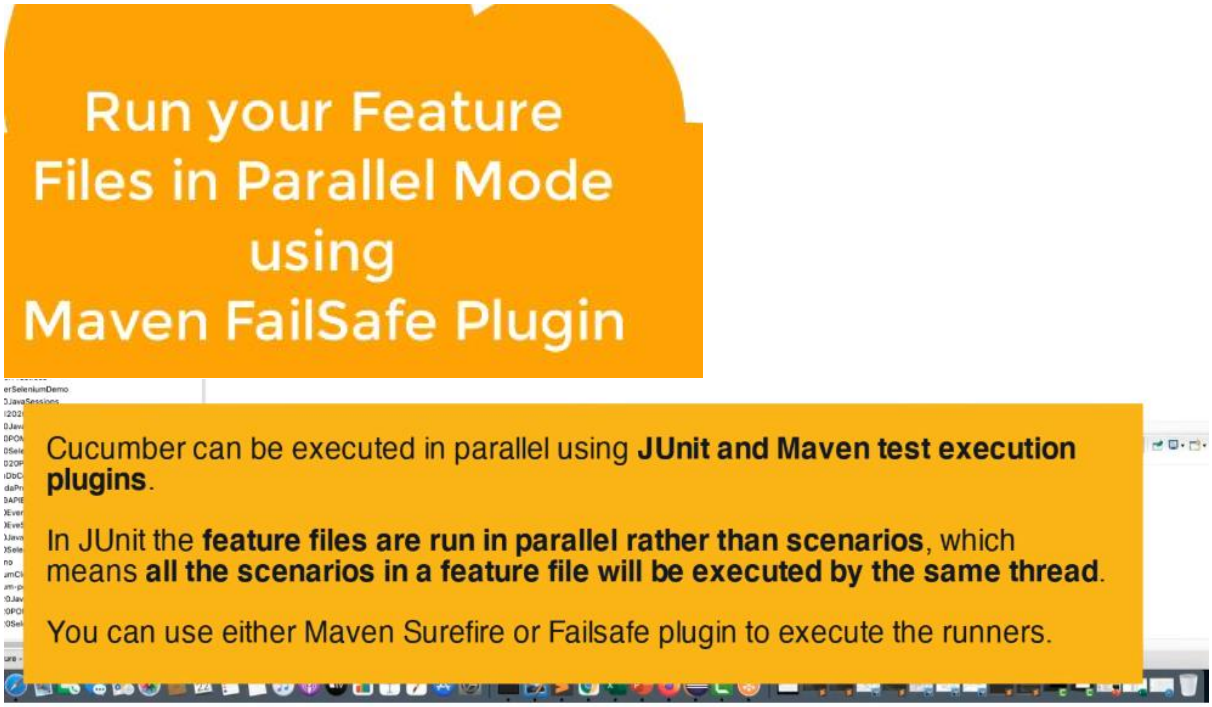


Junit has the above limitation, in junit - feature files run in parallel and not scenarios.

Second problem is cross browser testing. We may have to maintain different packages for testing same feature on different browsers.

Add the compiler plugin to achieve maven lifecycle commands-

```
104
105             <plugin>
106                 <groupId>org.apache.maven.plugins</groupId>
107                 <artifactId>maven-compiler-plugin</artifactId>
108                 <version>${maven.compiler.version}</version>
109                 <configuration>
110                     <encoding>UTF-8</encoding>
111                     <source>${java.version}</source>
112                     <target>${java.version}</target>
113                 </configuration>
114             </plugin>
```

```
116                 <groupId>org.apache.maven.plugins</groupId>
117                 <artifactId>maven-surefire-plugin</artifactId>
118                 <version>${maven.surefire.version}</version>
119                 <configuration>
```

Third is maven fail safe plugin-

We can write any value for the goal field as per our convenience.

Jumbo plugin which needs to be added-

```
128
129         <plugin>
130             <groupId>org.apache.maven.plugins</groupId>
131             <artifactId>maven-failsafe-plugin</artifactId>
132             <version>3.0.0-M3</version>
133             <executions>
134                 <execution>
135                     <goals>
136             <goal>integration-test</goal>
137                 </goals>
138                 <configuration>
139             <!-- UNCOMMENT - To add any exclusions if required -->
140             <!-- <excludes> <exclude>**/*IT*.java</exclude> </excludes>  -->
141             <includes>
142                 <!--UNCOMMENT BELOW LINE - To execute feature files with a single runner -->
143                 <!--give path of runner in the below step -->
144             <include>**/MyTestRunner.java</include>
145             <!--    UNCOMMENT BELOW LINE - To execute feature files with multiple runners -->
146             <!-- <include>**/*Runner.java</include> -->
147                 </includes>
148                 <!-- UNCOMMENT BELOW 3 LINES - To execute using parallel or combination
149                 option -->
150                 <!-- we can write parallel with classes also.-->
151             <parallel>methods</parallel>
152             <threadCount>4</threadCount>
153             <perCoreThreadCount>true</perCoreThreadCount>
154                 <!-- UNCOMMENT BELOW 3 LINES - To execute using forking or combination option -->
155             <!-- <forkCount>2</forkCount> <reuseForks>true</reuseForks>
156             <reportsDirectory>${project.build.directory}/failsafe-reports_${surefire.forkNumber}</reportsDirectory>-->
157             </configuration>
158             </execution>
159             </executions>
160             </plugin>
161
```

Open cmd and go to the project location. use the below code and hit enter.

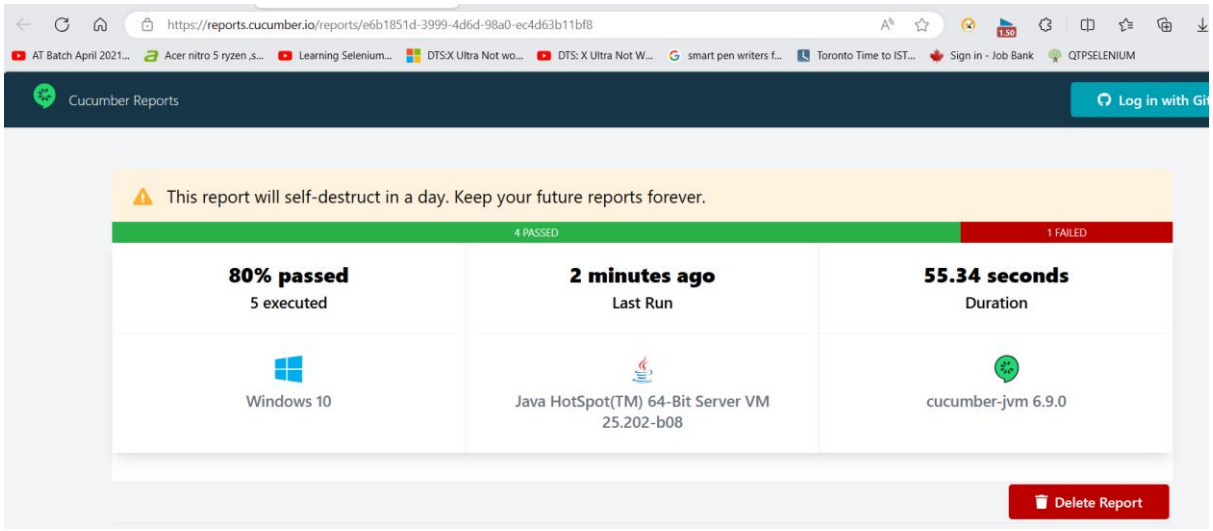
```
E:\Naveen Java Training\Cucumber\CucumberPomSeriesByKaranJulySevenA>mvn verify
```

Build success-

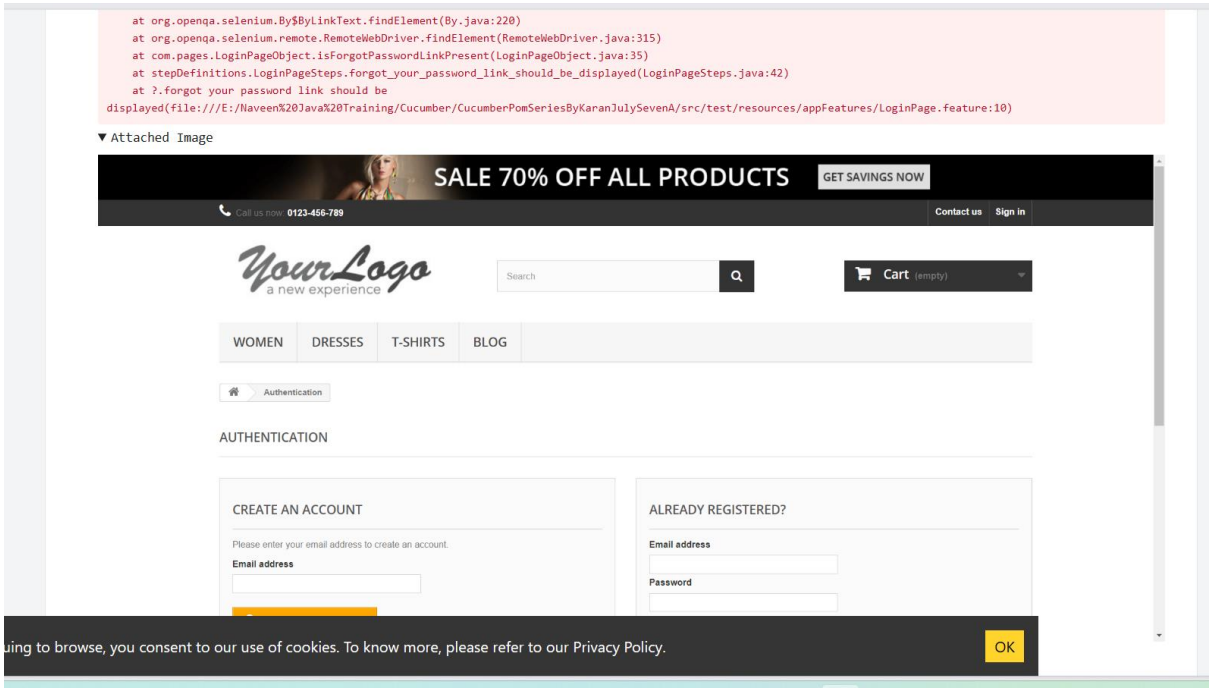
```
Command Prompt
? https://reports.cucumber.io/reports/e6b1851d-3999-4d6d-98a0-ec4d63b11bf8 ?
?                                                                          ?
? This report will self-destruct in 24h.                                  ?
? Keep reports forever: https://reports.cucumber.io/profile               ?
????????????????????????????????????????????????????????????????????????????[INFO] Tests
 Skipped: 0, Time elapsed: 62.234 s - in com.myTestRunner.MyTestRunner
[INFO]
[INFO] Results:
[INFO]
[INFO] Tests run: 0, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  01:11 min
[INFO] Finished at: 2023-07-07T22:54:24+02:00
[INFO] ------------------------------------------------------------------------
[WARNING]
[WARNING] Plugin validation issues were detected in 4 plugin(s)
```

Open report-

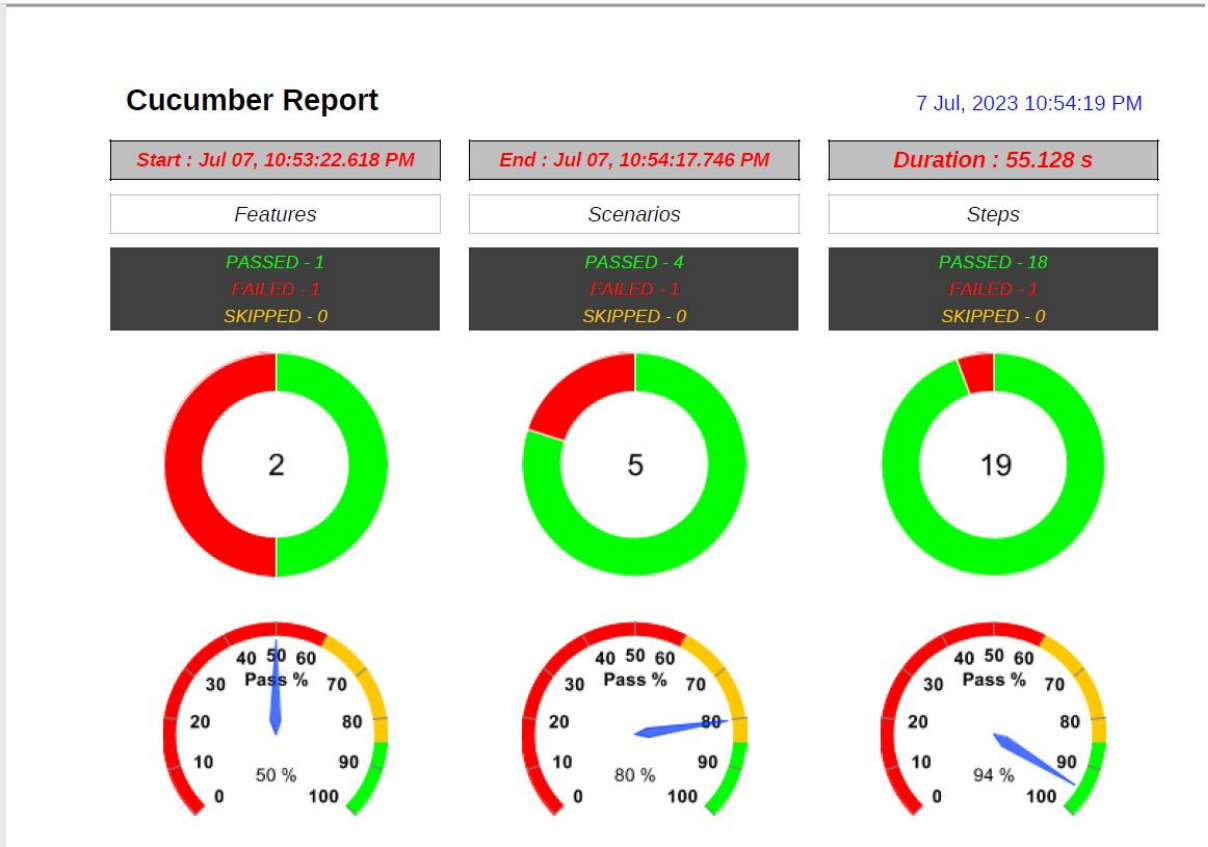
3



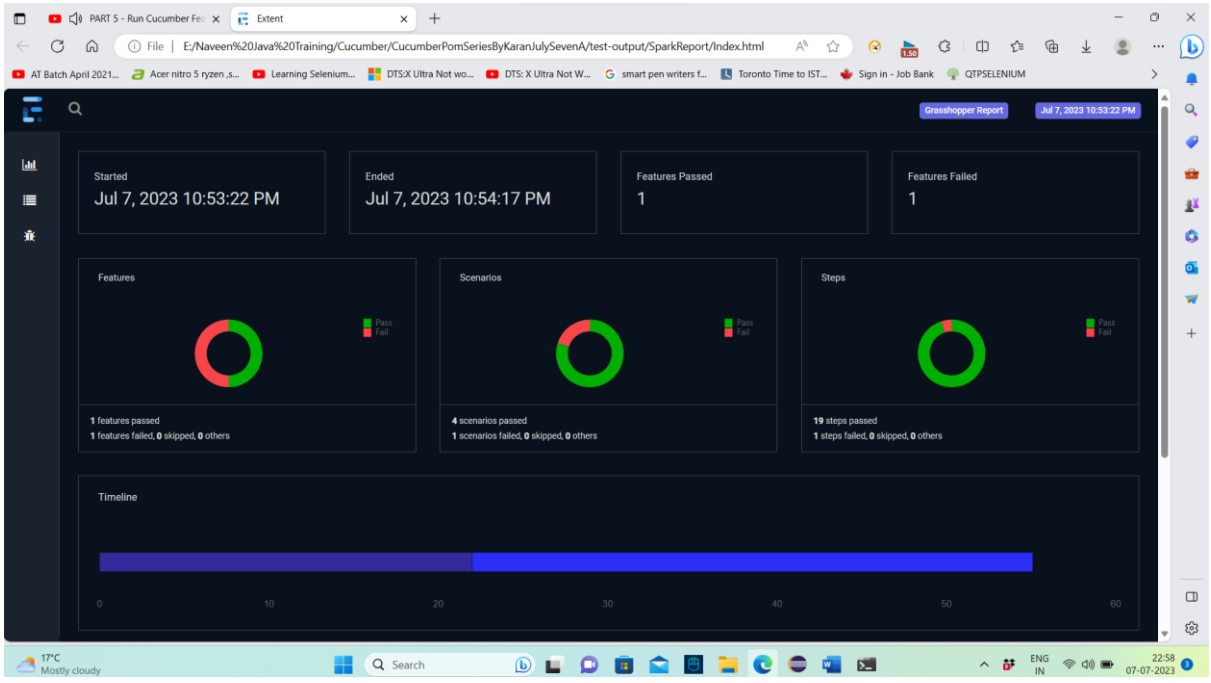
For failed case we get screenshot-



Pdf report-



Index file also fine-



Lets see the run with thread –

MyTestRunner.java

```
1  package com.myTestRunner;
2
3  import org.junit.runner.RunWith;
7
8  @RunWith(Cucumber.class)
9  @CucumberOptions(
10         features = { "src/test/resources/appFeatures/" },
11 glue = { "stepDefinitions", "appHooks" },
12 //this adapter needed for the new extent reports.
13 //we can generate timeline html reports for threads using timeline plugin. we can know how many threads participated.
14 //we can see what threads present in a pool, which threads executed which scenario.
15 //we can give name for timeline .. this is the folder which will be created once test runs.
16 plugin = { "pretty",
17         "com.aventstack.extentreports.cucumber.adapter.ExtentCucumberAdapter:",
18         "timeline:test-output-thread/"}
19
20
21 )
22 public class MyTestRunner {
23
24 }
```

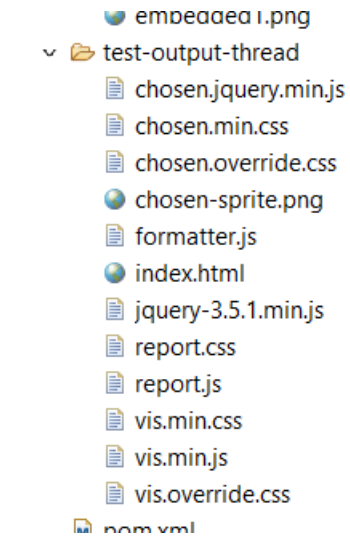
Run using mvn verify-

Don’t use mvn clean install.

```
? https://reports.cucumber.io/reports/04d12139-8c9d-4cc2-8463-9dc7fe20c442 ?
?                                                                          ?
? This report will self-destruct in 24h.                                   ?
? Keep reports forever: https://reports.cucumber.io/profile                ?
????????????????????????????????????????????????????????????????????????????[INFO] Tests
- in com.myTestRunner.MyTestRunner
[INFO]
[INFO] Results:
[INFO]
[INFO] Tests run: 0, Failures: 0, Errors: 0, Skipped: 0
[INFO]
[INFO] ------------------------------------------------------------------------
[INFO] BUILD SUCCESS
[INFO] ------------------------------------------------------------------------
[INFO] Total time:  01:04 min
[INFO] Finished at: 2023-07-08T07:37:39+02:00
[INFO] ------------------------------------------------------------------------
[WARNING]
[WARNING] Plugin validation issues were detected in 4 plugin(s)
[WARNING]
[WARNING]  * org.apache.maven.plugins:maven-compiler-plugin:3.8.1
```

Refresh project.

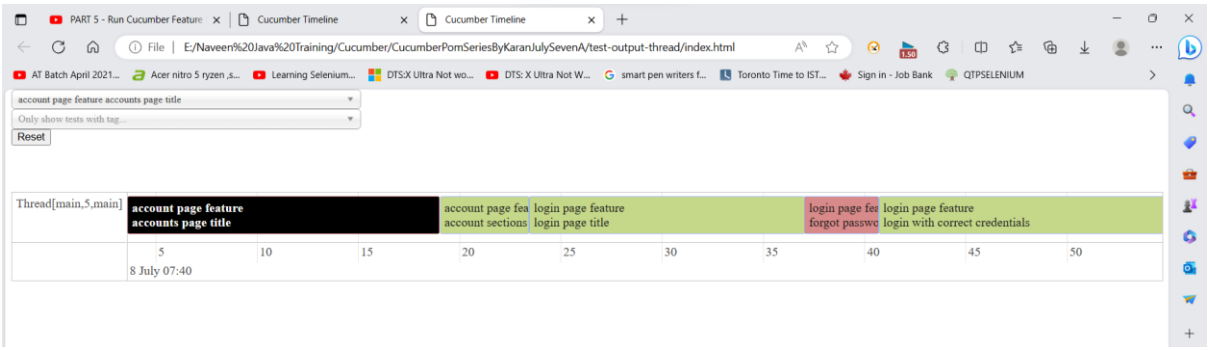
We get new folder here.



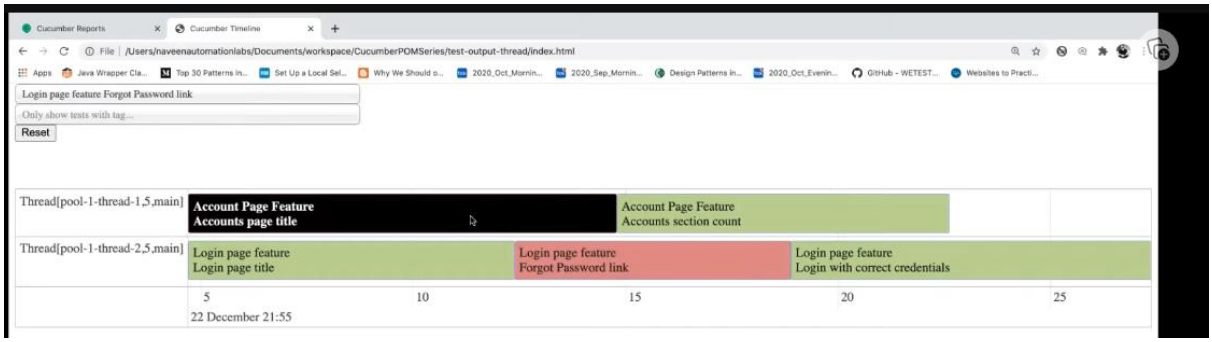
Open index.html.

We get such type of output.

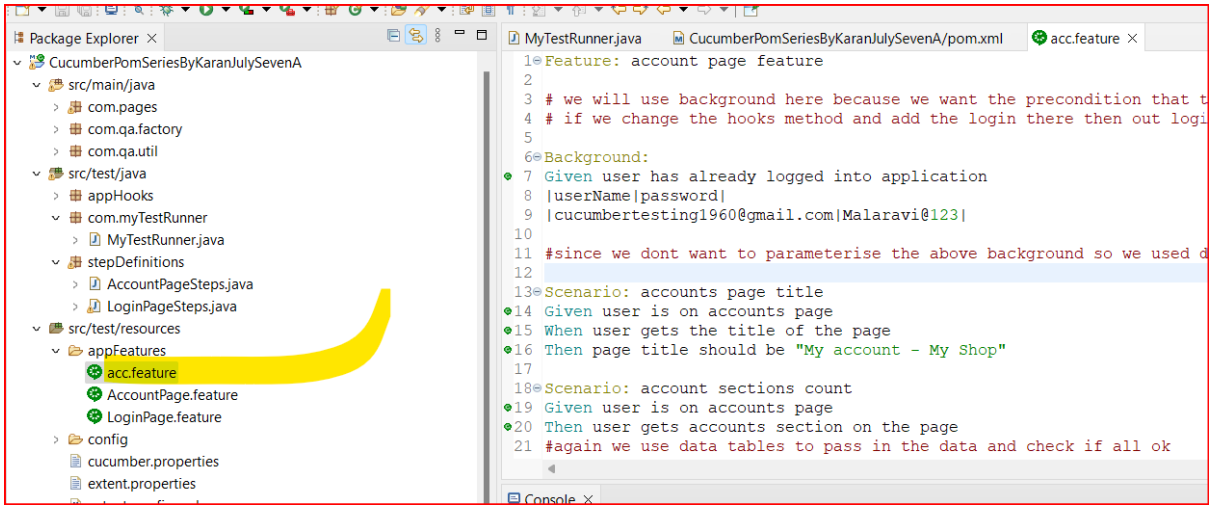
Mine is not coming properly, for Naveen it works.



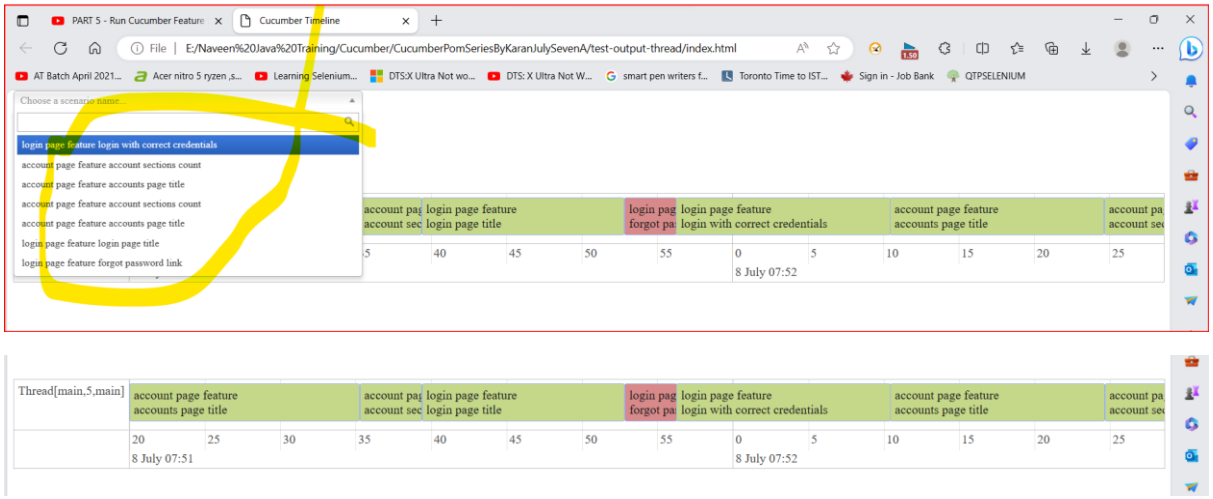
See naveens output-



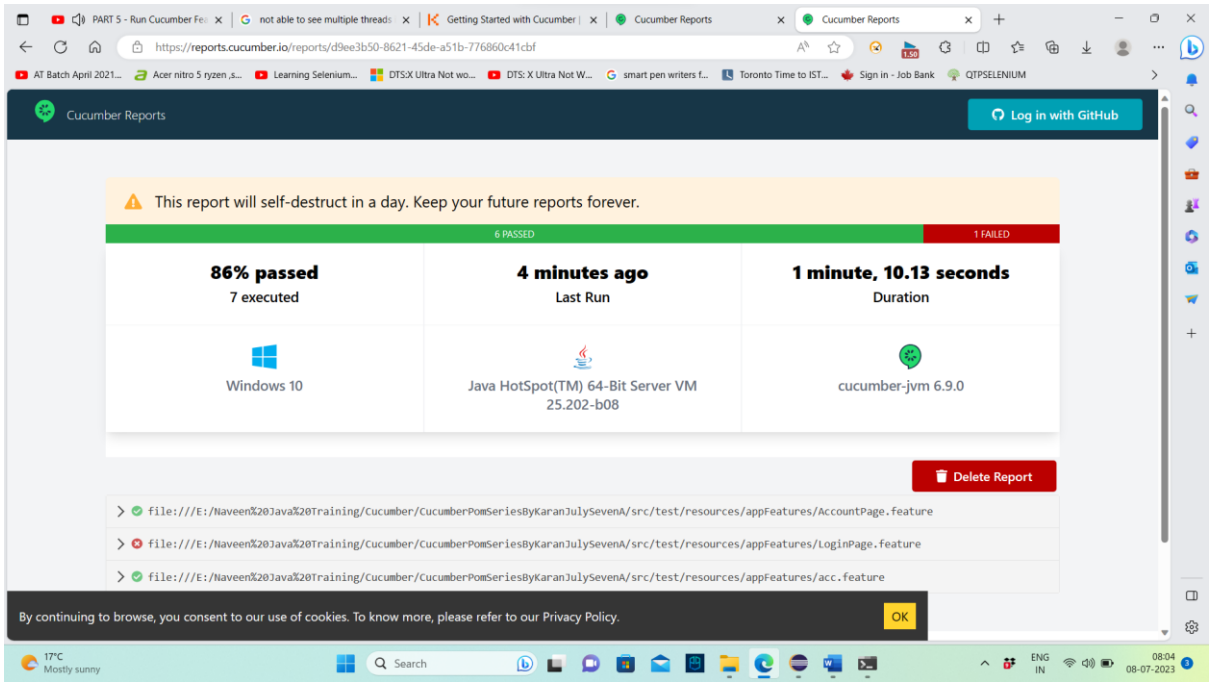
Lets increase one more feature file and see if thread count increases-



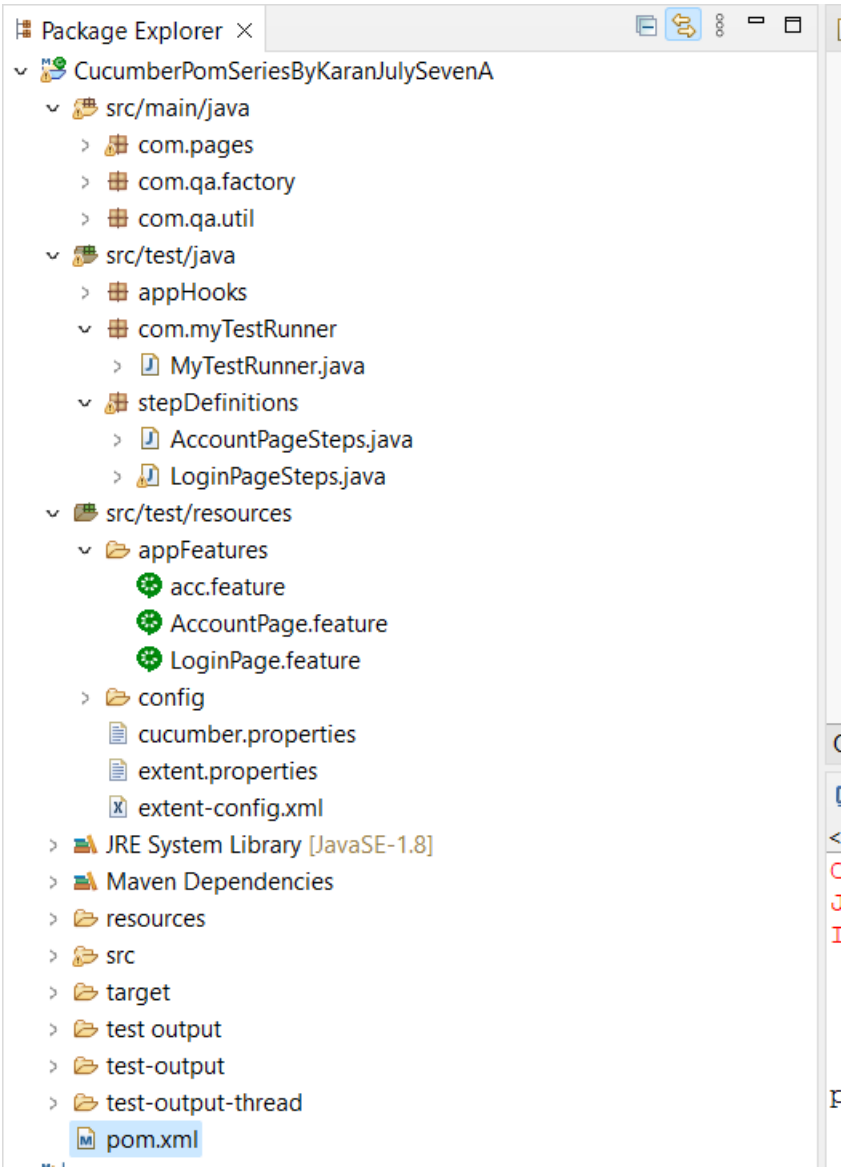
Output-



Cucumber report-


Cucumber Reports
Log in with GitHub
This report will self-destruct in a day. Keep your future reports forever.
6 PASSED
1 FAILED
86% passed
7 executed
4 minutes ago
Last Run
1 minute, 10.13 seconds
Duration
Windows 10
Java HotSpot(TM) 64-Bit Server VM 25.202-b08
cucumber-jvm 6.9.0
Delete Report
file:///E:/Naveen%20Java%20Training/Cucumber/CucumberPomSeriesByKaranJulySevenA/src/test/resources/appFeatures/AccountPage.feature
file:///E:/Naveen%20Java%20Training/Cucumber/CucumberPomSeriesByKaranJulySevenA/src/test/resources/appFeatures/LoginPage.feature
file:///E:/Naveen%20Java%20Training/Cucumber/CucumberPomSeriesByKaranJulySevenA/src/test/resources/appFeatures/acc.feature
By continuing to browse, you consent to our use of cookies. To know more, please refer to our Privacy Policy.
OK

Project structure-



Codes from this chapter-

Runner file-

```
package com.myTestRunner;

import org.junit.runner.RunWith;

import io.cucumber.junit.Cucumber;
import io.cucumber.junit.CucumberOptions;

@RunWith(Cucumber.class)
@CucumberOptions(
                features = { "src/test/resources/appFeatures/" },
glue = { "stepDefinitions", "appHooks" },
//this adapter needed for the new extent reports.
//we can generate timeline html reports for threads using timeline plugin. we can know how many threads participated.
```

```
//we can see what threads present in a pool, which threads executed which scenario.
//we can give name for timeline .. this is the folder which will be created once test runs.
plugin = { "pretty",
                    "com.aventstack.extentreports.cucumber.adapter.ExtentCucumberAdapter:",
                    "timeline:test-output-thread/"}


)
public class MyTestRunner {

}
```