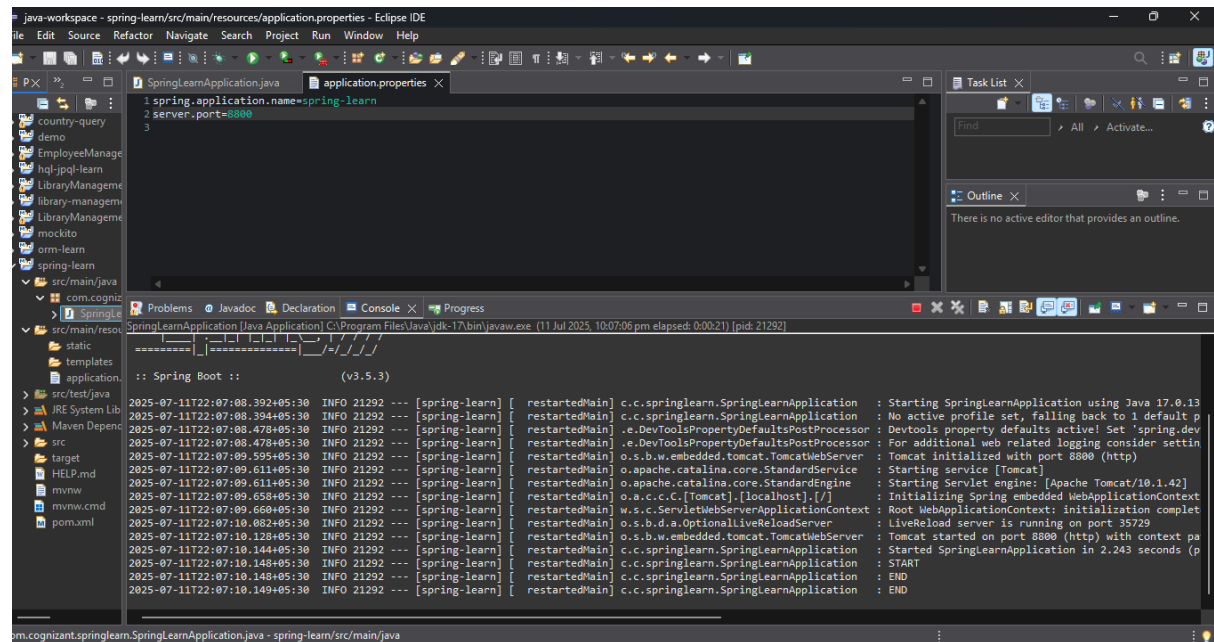


Create a Spring Web Project using Maven

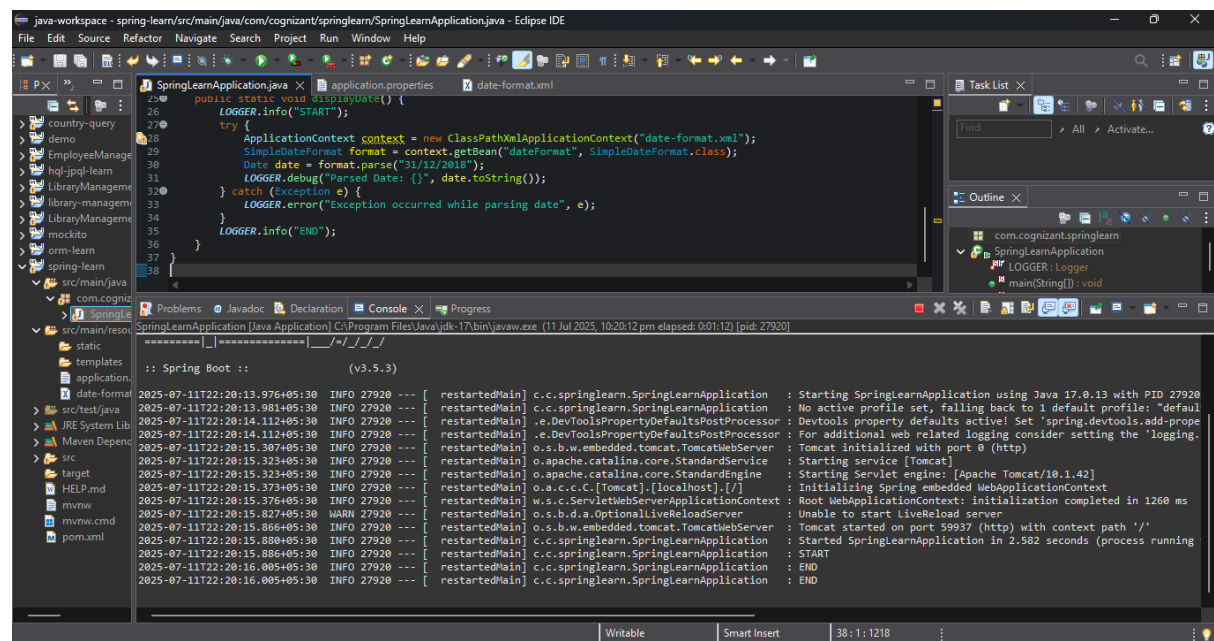
Output:



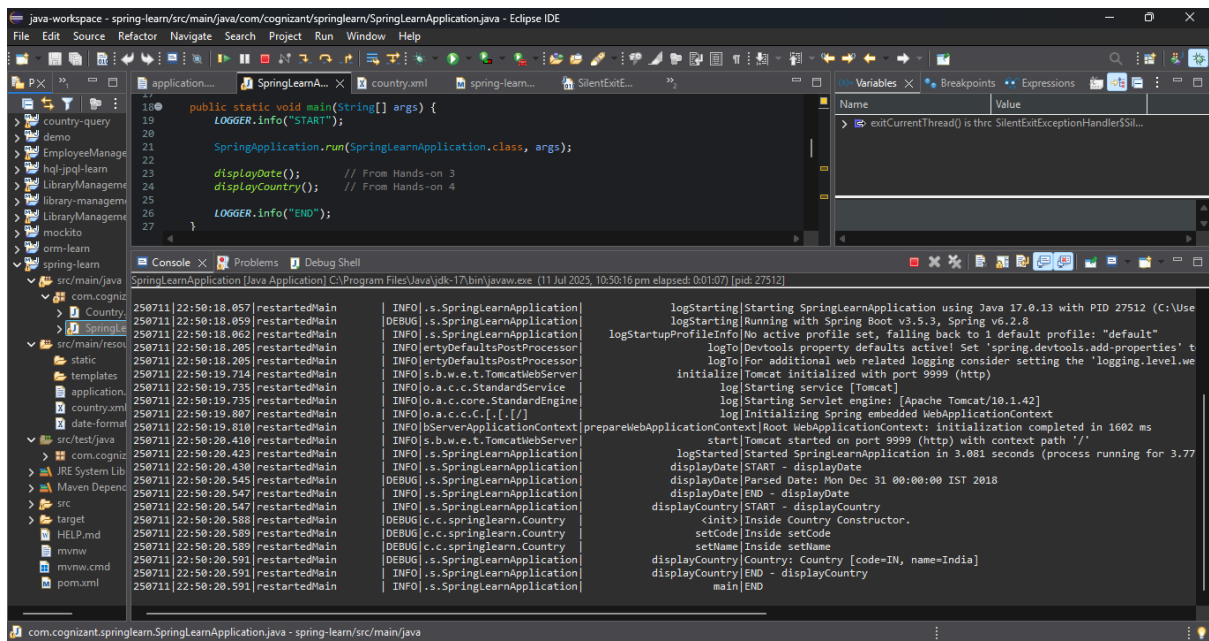
Hands on 2

Spring Core – Load SimpleDateFormat from Spring Configuration XML

Output:



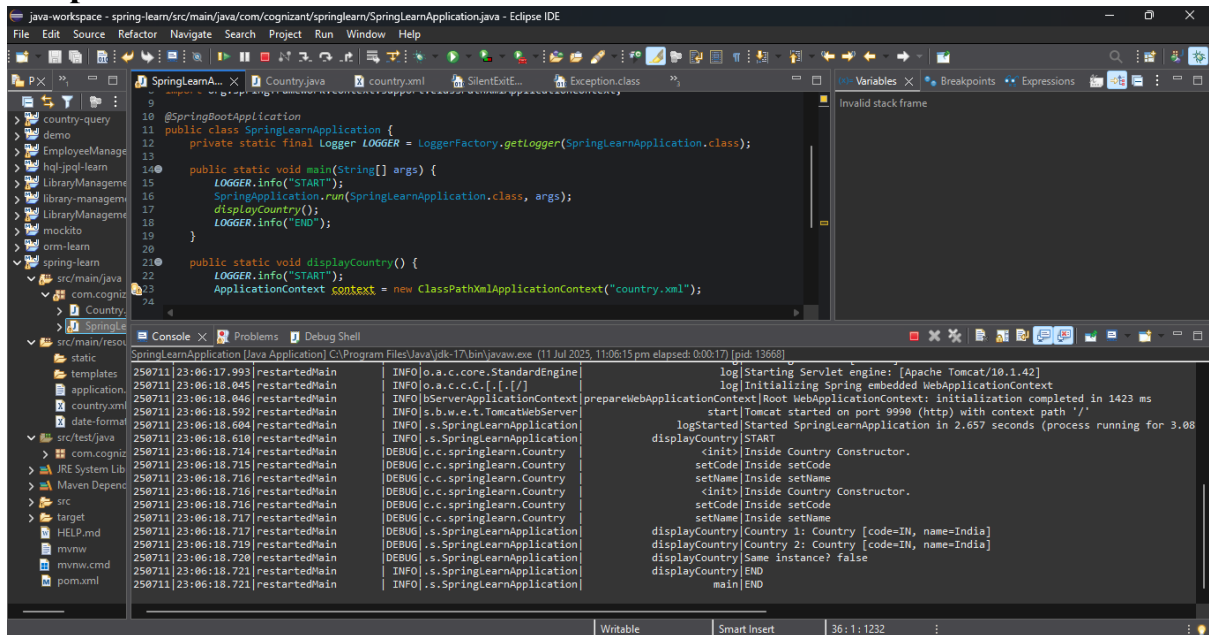
Output:



Hands on 5

Spring Core – Demonstration of Singleton Scope and Prototype Scope

Output:



The screenshot shows the Eclipse IDE with the `SpringLearnApplication.java` file open. The code defines a `SpringLearnApplication` class with a `main` method and a `displayCountry` method. The `main` method initializes the application context and calls `displayCountry`. The `displayCountry` method creates a `Country` object and prints its details.

```
9  @SpringBootApplication
10 public class SpringLearnApplication {
11     private static final Logger LOGGER = LoggerFactory.getLogger(SpringLearnApplication.class);
12
13     public static void main(String[] args) {
14         LOGGER.info("START");
15         SpringApplication.run(SpringLearnApplication.class, args);
16         displayCountry();
17         LOGGER.info("END");
18     }
19
20     public static void displayCountry() {
21         LOGGER.info("START");
22         ApplicationContext context = new ClassPathXmlApplicationContext("country.xml");
23     }
24 }
```

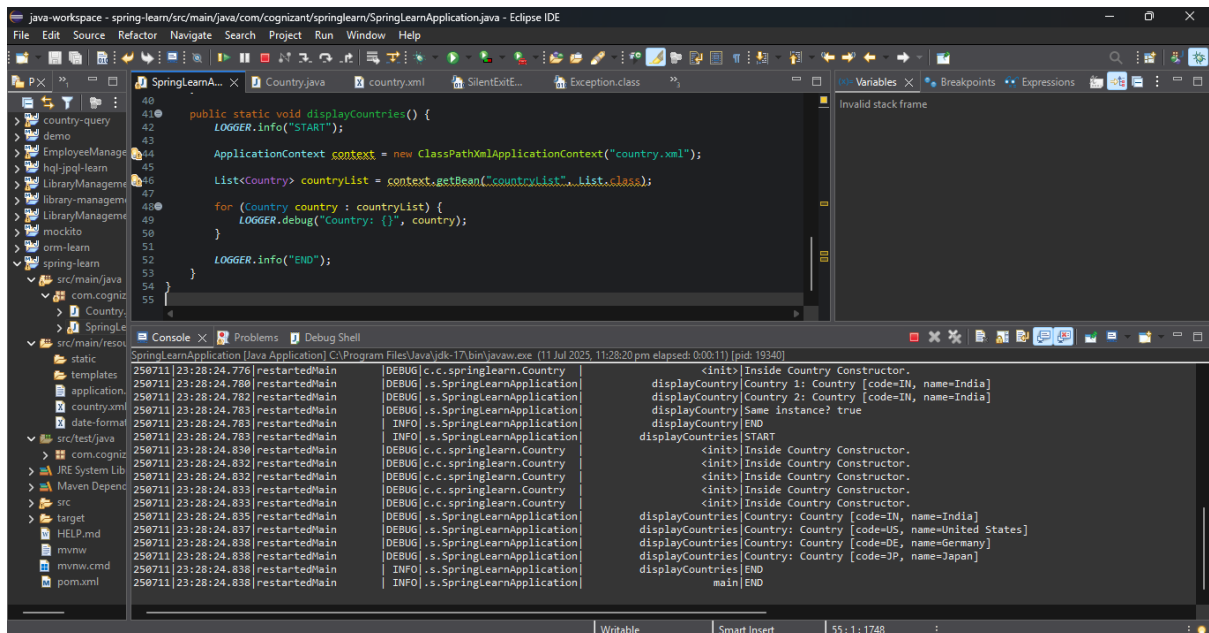
The console output shows the application starting and running successfully. It displays the following log messages:

```
SpringLearnApplication [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (11 Jul 2025, 11:06:15 pm elapsed: 0:00:17) [pid: 13668]
250711 | 23:06:17.983 | restartedMain | INFO | o.a.c.c.o.StandardEngine | log[Starting Servlet engine: [Apache Tomcat/10.1.42]
250711 | 23:06:18.045 | restartedMain | INFO | o.a.c.c.C.[.[.[/ | log[Initializing Spring embedded WebApplicationContext
250711 | 23:06:18.046 | restartedMain | INFO | bServerApplicationContext | prepareWebApplicationContext: initialization completed in 1423 ms
250711 | 23:06:18.592 | restartedMain | INFO | s.b.w.e.t.TomcatWebServer | start[Tomcat started on port 9990 (http) with context path '/']
250711 | 23:06:18.604 | restartedMain | INFO | .s.SpringLearnApplication | log[Started SpringLearnApplication in 2.657 seconds (process running for 3.08
250711 | 23:06:18.610 | restartedMain | INFO | .s.SpringLearnApplication | displayCountry/START
250711 | 23:06:18.714 | restartedMain | DEBUG | c.c.SpringLearn.Country | <init> Inside Country Constructor.
250711 | 23:06:18.715 | restartedMain | DEBUG | c.c.SpringLearn.Country | setCode Inside setCode
250711 | 23:06:18.716 | restartedMain | DEBUG | c.c.SpringLearn.Country | setName Inside setName
250711 | 23:06:18.716 | restartedMain | DEBUG | c.c.SpringLearn.Country | <init> Inside Country Constructor.
250711 | 23:06:18.716 | restartedMain | DEBUG | c.c.SpringLearn.Country | setName Inside setName
250711 | 23:06:18.717 | restartedMain | DEBUG | .s.SpringLearnApplication | displayCountry/ Country 1: Country [code=IN, name=India]
250711 | 23:06:18.719 | restartedMain | DEBUG | .s.SpringLearnApplication | displayCountry/ Country 2: Country [code=IN, name=India]
250711 | 23:06:18.720 | restartedMain | DEBUG | .s.SpringLearnApplication | displayCountry/ Same instance? false
250711 | 23:06:18.721 | restartedMain | INFO | .s.SpringLearnApplication | displayCountry/END
250711 | 23:06:18.721 | restartedMain | INFO | .s.SpringLearnApplication | main|END
```

Hands on 6

Spring Core – Load list of countries from Spring Configuration XML

Output:



The screenshot shows the Eclipse IDE with the `SpringLearnApplication.java` file open. The code defines a `SpringLearnApplication` class with a `main` method and a `displayCountries` method. The `main` method initializes the application context and calls `displayCountries`. The `displayCountries` method loads a list of countries from the XML configuration and prints their details.

```
40 public static void displayCountries() {
41     LOGGER.info("START");
42
43     ApplicationContext context = new ClassPathXmlApplicationContext("country.xml");
44
45     List<Country> countryList = context.getBean("countryList", List.class);
46
47     for (Country country : countryList) {
48         LOGGER.debug("Country: {}", country);
49     }
50
51     LOGGER.info("END");
52 }
53
54 }
```

The console output shows the application starting and running successfully. It displays the following log messages:

```
SpringLearnApplication [Java Application] C:\Program Files\Java\jdk-17\bin\javaw.exe (11 Jul 2025, 11:28:20 pm elapsed: 0:00:11) [pid: 19340]
250711 | 23:28:24.776 | restartedMain | DEBUG | c.c.SpringLearn.Country | <init> Inside Country Constructor.
250711 | 23:28:24.780 | restartedMain | DEBUG | .s.SpringLearnApplication | displayCountry/ Country 1: Country [code=IN, name=India]
250711 | 23:28:24.782 | restartedMain | DEBUG | .s.SpringLearnApplication | displayCountry/ Country 2: Country [code=IN, name=India]
250711 | 23:28:24.783 | restartedMain | DEBUG | .s.SpringLearnApplication | displayCountry/ Same instance? true
250711 | 23:28:24.783 | restartedMain | INFO | .s.SpringLearnApplication | displayCountry/END
250711 | 23:28:24.783 | restartedMain | INFO | .s.SpringLearnApplication | displayCountries/START
250711 | 23:28:24.830 | restartedMain | DEBUG | c.c.SpringLearn.Country | <init> Inside Country Constructor.
250711 | 23:28:24.832 | restartedMain | DEBUG | c.c.SpringLearn.Country | <init> Inside Country Constructor.
250711 | 23:28:24.832 | restartedMain | DEBUG | c.c.SpringLearn.Country | <init> Inside Country Constructor.
250711 | 23:28:24.833 | restartedMain | DEBUG | c.c.SpringLearn.Country | <init> Inside Country Constructor.
250711 | 23:28:24.833 | restartedMain | DEBUG | .s.SpringLearnApplication | displayCountries/ Country: Country [code=IN, name=India]
250711 | 23:28:24.837 | restartedMain | DEBUG | .s.SpringLearnApplication | displayCountries/ Country: Country [code=US, name=United States]
250711 | 23:28:24.838 | restartedMain | DEBUG | .s.SpringLearnApplication | displayCountries/ Country: Country [code=DE, name=Germany]
250711 | 23:28:24.838 | restartedMain | DEBUG | .s.SpringLearnApplication | displayCountries/ Country: Country [code=JP, name=Japan]
250711 | 23:28:24.838 | restartedMain | INFO | .s.SpringLearnApplication | displayCountries/END
250711 | 23:28:24.838 | restartedMain | INFO | .s.SpringLearnApplication | main|END
```