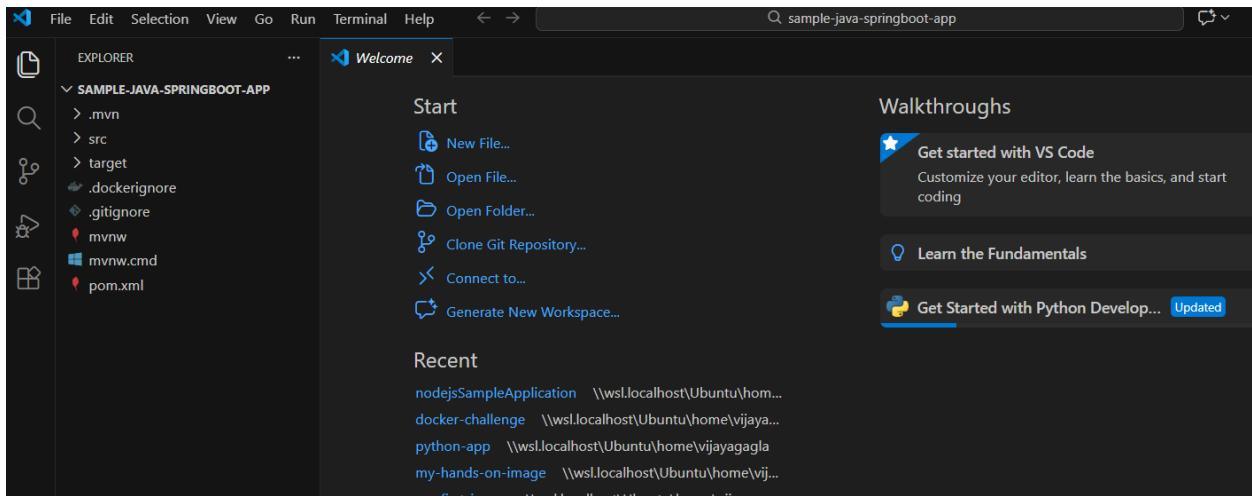


LAB- Build and Deploy a Java App using Docker

TASK 1 – Containerizing a Java Spring Boot Application

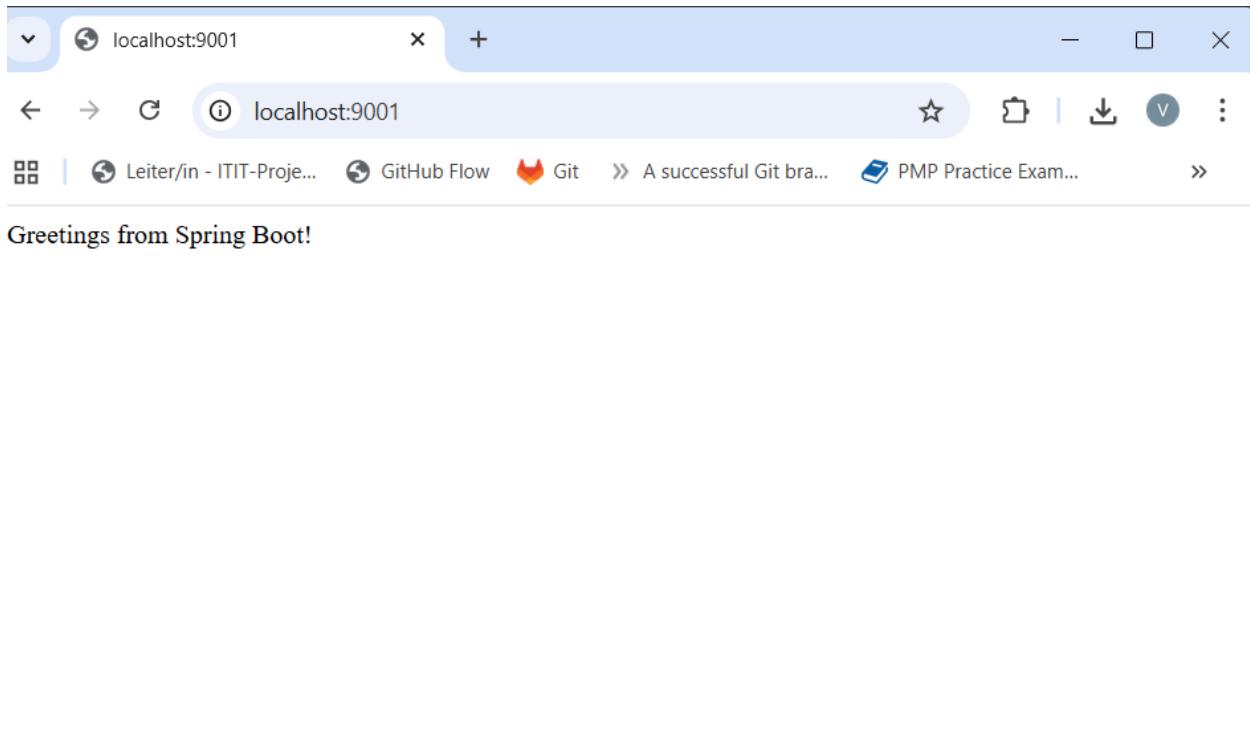


```
vijayagagla@DESKTOP-FP4OP26:~/sample-java-springboot-app$ java --version
openjdk 17.0.18 2026-01-20
OpenJDK Runtime Environment (build 17.0.18+8-Ubuntu-124.04.1)
OpenJDK 64-Bit Server VM (build 17.0.18+8-Ubuntu-124.04.1, mixed mode, sharing)
```

The screenshot shows the VS Code interface with the following details:

- File Explorer:** Shows the project structure for "SAMPLE-JAVA-SPRINGBOOT-APP". It includes a ".mvn" folder, a "src" folder containing "main" and "resources" subfolders, and "test", "target", ".dockignore", ".gitignore", "Dockerfile", "mvnw", "mvnw.cmd", and "pom.xml" files.
- Search Bar:** Contains the search term "sample-java-springboot-app".
- Code Editor:** Displays the "application.properties" file with the following content:

```
spring.application.name=sample-web-java-app
server.port=9001
```
- Terminal:** Shows the output of the command "shishirpani@shishirpani-Vostro-5470:~/Documents/Sample-Java-SpringBoot-App\$./mvnw spring-boot:run" which lists various Spring beans such as sslProperties, sslBundleRegistrar, standardJacksonObjectMapperBuilderCustomizer, stringHttpMessageConverter, taskExecutorBuilder, taskSchedulerBuilder, themeResolver, threadPoolTaskExecutorBuilder, threadPoolTaskSchedulerBuilder, tomcatServletWebServerFactory, tomcatServletWebServerFactoryCustomizer, tomcatWebServerFactoryCustomizer, viewControllerHandlerMapping, and viewNameTranslator.



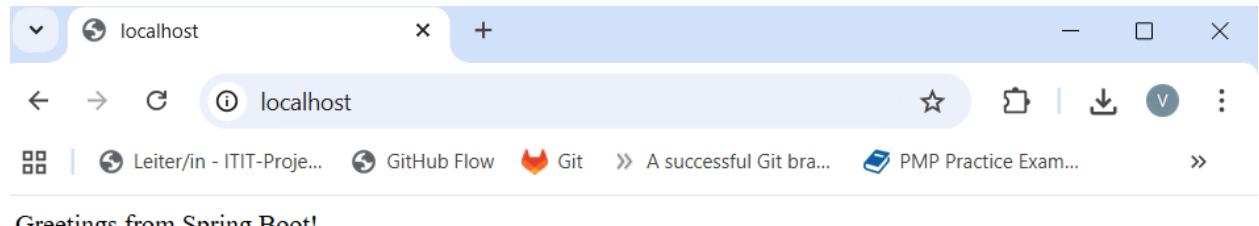
TASK 2 – Writing the Dockerfile

```
sample-java-springboot-app
File Edit Selection View Go Run Terminal Help ⏎ →
Dockerfile
FROM eclipse-temurin:17-jdk-alpine
WORKDIR /app
EXPOSE 8080
COPY .mvn/.mvn pom.xml .
COPY mvnw dependency:go-offline
COPY src ./src
CMD ["./mvnw", "spring-boot:run"]
```

A screenshot of the Visual Studio Code (VS Code) interface. The left sidebar shows the project structure for 'SAMPLE-JAVA-SPRINGBOOT-APP' with files like '.mvn', 'src', 'target', '.dockerignore', '.gitignore', 'Dockerfile', 'mvnw', 'mvnw.cmd', and 'pom.xml'. The right pane shows the 'Dockerfile' content:

TASK 3 – Building and Running the Container

```
vijayagagla@DESKTOP-FP4OP26:~/sample-java-springboot-app$ docker image ls
REPOSITORY          TAG      IMAGE ID   CREATED    SIZE
sample-java-app     latest   24392e2ba6de   About a minute ago  438MB
sample-java-app     latest   735726662f5c   About an hour ago  4.19GB
```



Greetings from Spring Boot!