## 1. Automate any web login flow using Selenium

## Step 1: Add Selenium to your pom.xml (if using Maven)

```
<dependencies>
  <dependency>
  <groupId>org.seleniumhq.selenium</groupId>
  <artifactId>selenium-java</artifactId>
  <version>4.21.0</version>
  </dependency>
</dependencies>
```

## Step 2: Java Code to Automate Login Flow

```
import org.openqa.selenium.By;
import org.openqa.selenium.WebDriver;
import org.openqa.selenium.WebElement;
import org.openqa.selenium.chrome.ChromeDriver;
public class WebLoginAutomation {
  public static void main(String[] args) {
    // Set the path to your chromedriver executable
    System.setProperty("webdriver.chrome.driver", "path/to/chromedriver");
    // Initialize the Chrome driver
    WebDriver driver = new ChromeDriver();
    try {
      // Navigate to the login page
      driver.get("https://example.com/login");
      // Maximize the browser window
```

```
driver.manage().window().maximize();
  // Find username and password fields and input credentials
  WebElement username = driver.findElement(By.id("username"));
  WebElement password = driver.findElement(By.id("password"));
  username.sendKeys("yourUsername");
  password.sendKeys("yourPassword");
  // Click the login button
  WebElement loginButton = driver.findElement(By.id("loginBtn"));
  loginButton.click();
  // Optionally, add a simple wait or check to verify login success
  Thread.sleep(3000); // Simple wait, replace with WebDriverWait in real use
  if (driver.getCurrentUrl().contains("dashboard")) {
    System.out.println("Login successful!");
  } else {
    System.out.println("Login failed or redirected incorrectly.");
  }
} catch (Exception e) {
  e.printStackTrace();
} finally {
  // Close the browser
  driver.quit();
```

}

}