1.Design and Document Test Cases for a Downloaded Sample Project

Objective:

To understand how to design, write, and document test cases for a real-world software application by analyzing its features and behavior.

Sample Project Used:

"Login and Registration System" Web App
(You can download a basic version from GitHub – search: simple-login-registration-php or use any sample HTML/PHP or Python Flask app)

Tools Required:

- Browser (Chrome/Firefox)

- Text Editor/IDE (VS Code, Sublime, Notepad++)

- Test Case Document Template (Excel or Google Sheet)

- Optionally: Postman (for API testing), Selenium (for automation – advanced)

Step-by-Step Procedure:

- **Step 1: Understand the Project**

Explore the Application Functionality

- Open the application in a browser (http://localhost/project-folder)

- Identify the core modules:

    - Login Page

    - Registration Page

    - Dashboard Page

○ Logout Function

Example Use Cases:

- User can register with email & password

- User can log in with valid credentials

- Wrong credentials show error message

- Dashboard is protected (only after login)

◆ Step 2: Identify Test Scenarios

A **test scenario** is a high-level functionality to be tested.
Prepare a list like this:

Sr	Module	Test Scenario Description
1	Registration	Verify user can register with valid details
2	Registration	Verify email field validation
3	Login	Verify user can log in with correct credentials
4	Login	Show error for invalid login
5	Dashboard	Access denied if user not logged in
6	Logout	Verify user is logged out and redirected to login page

◆ Step 3: Write Test Cases

Create a table with all necessary test case elements:

TC ID	Module	Test Case Description	Input Data	Expected Result	Actual Result	Status

TC01	Registration	Register with valid details	Email: user@test.com Password: Abc@123	User registered, redirect to login
TC02	Registration	Invalid email format	Email: usertest.com Password: Abc@123	Show "Invalid Email Format"
TC03	Login	Login with correct credentials	Email: user@test.com Password: Abc@123	Redirect to Dashboard
TC04	Login	Login with wrong password	Email: user@test.com Password: wrongpass	Show "Invalid credentials" error
TC05	Dashboard	Access dashboard without login	URL: /dashboard.php	Redirect to login page
TC06	Logout	Click logout	Click Logout Button	Redirect to login page, session destroyed

◆ Step 4: Execute the Test Cases

For each test case:

- Perform the steps manually in the application.

- Record the **Actual Result**.

- Mark the test case as **Pass/Fail** in the **Status** column.

Example:

TC ID	Actual Result	Status
TC01	Registered successfully → redirected	Pass
TC02	Error message shown for invalid email	Pass
TC03	Login success, user goes to dashboard	Pass
TC04	Shows error message "Invalid credentials"	Pass
TC05	Direct dashboard access redirected to login	Pass
TC06	Logout button works, session cleared	Pass

◆ **Step 5: Bug Reporting (Optional)**

If any test case fails, document it in a bug report format:

Bug ID	Title	Steps to Reproduce	Expected Result	Actual Result	Priority	Status
BUG01	Login allows blank password	Leave password field blank, click Login	Show validation msg	Redirects to dashboard	High	Open

Summary of the Report

- Total Test Cases: 6

- Passed: 6

- Failed: 0

- Bugs Found: 0

Notes for Students:

- Always number and name your test cases clearly (TC01, TC02…).

- Use clear language for input/output.

- Use Excel/Sheets to document.

- You can automate these using Selenium in future labs.

📂 Submission:

students to submit:

- Test Case Document (Excel/PDF format)

- Screenshots of actual test case execution

- Bug Report if applicable