

## Task # 6

### Task: Secure Login

#### Objective:

To implement a secure login functionality using JavaScript with the provided username and password.

#### Instructions:

##### Overview:

You are provided with the HTML and JavaScript code for a secure login page. The page includes input fields for username and password, along with a login button. Your task is to enhance the security of the login process by using the provided username and password.

##### Credentials:

Username: Aptech

Password: aptech123

**Hashed Password:** 617074656368313233

##### Tasks to Complete:

- Implement the **hashPassword()** function to hash the user's password before comparing it with the stored hash.
- Modify the **login()** function to compare the hashed password with the hashed version stored in the system.
- Ensure that the login is successful only if the username matches and the **hashed password** matches the stored hashed password.
- Display **appropriate messages** indicating successful login or incorrect credentials.

##### Guidelines:

- Follow the comments in the JavaScript code to understand the flow of execution and the purpose of each function.
- Utilize the provided username (Aptech) and password (aptech123) for testing the login functionality.
- Convert the provided password (aptech123) to its hash value (617074656368313233) using any suitable method.
- Store the hashed password securely in the system.
- Test the login functionality with correct and incorrect credentials to ensure it functions as expected.
- Provide clear feedback to the user about the outcome of the login attempt.

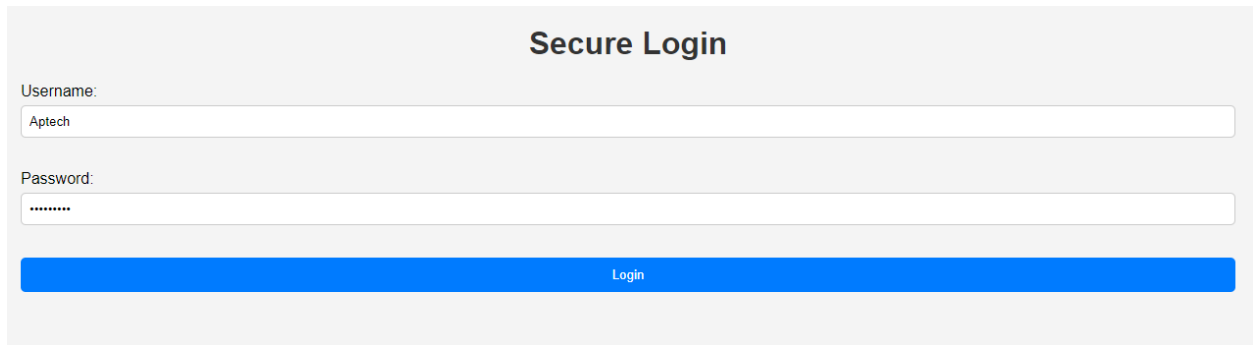
### User Interface:

- ✓ Create a simple and intuitive interface without the need for extensive CSS styling.
- ✓ Focus on functionality rather than visual appearance.

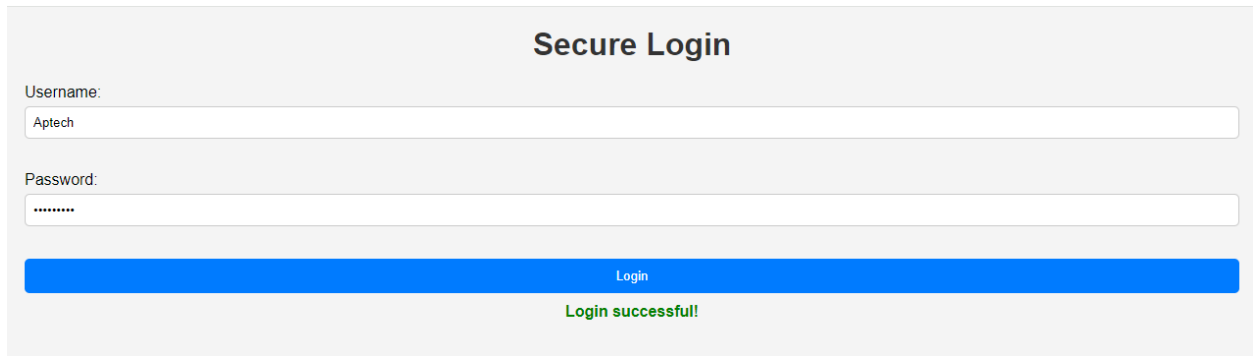
### Note:

This task is designed to reinforce your understanding of JavaScript functions and security concepts related to password handling. Take your time to comprehend the provided code and implement the necessary enhancements to ensure a secure login process.

### Screenshots:



The screenshot shows a web form titled "Secure Login". It has two input fields: "Username:" with the value "Aptech" and "Password:" with masked characters "\*\*\*\*\*". Below the fields is a blue button labeled "Login".



This screenshot shows the same "Secure Login" form after a successful login. The "Username:" field still contains "Aptech" and the "Password:" field is masked. The blue "Login" button is still present. Below the button, the text "Login successful!" is displayed in green.