1. Write a script to greet your website visitor using JS alert box. (Welcome to Our Website).

```javascript
Alert("Welcome to Our Website");
```

You can include this script in the `<script>` tag within the `<head>` or `<body>` section of your HTML document.

2. Write a script to display message on your web page. (Error! Please Enter a Valid password)-

```javascript
Document.write("Error! Please Enter a valid password");
```
This script can be included in the `<script>` tag within the `<head>` or `<body>` section of your HTML document. Keep in mind that using `document.write` directly in this manner might not be the best practice in more complex applications. For better manipulation of the DOM, consider using methods like `innerHTML` or interacting with specific elements by their Ids or classes.

3. Write a script to display message on your web page: (Hint : Use line break)-

```javascript
Document.write("Message line 1 <br> Message line 2");
```

This script uses the `<br>` tag to create a line break between the two message lines when displayed on the web page. You can include this script in the `<script>` tag within the `<head>` or `<body>` section of your HTML document.

4. Write a script to display messages in sequence (3 Alerts)-

```javascript
Alert("First message");
Alert("Second message");
Alert("Third message");
```

Each `alert` statement will display a message in a sequence, and the user will need to acknowledge each alert before the next one appears. Include this script in the `<script>` tag within the `<head>` or `<body>` section of your HTML document.

5. Make use of alerts in your new/existing HTML & CSS project.-

To incorporate alerts into your HTML & CSS project, you can use JavaScript. Here's an example of how you can integrate alerts in a simple HTML file:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Alert Example</title>
    <style>
        /* Your CSS styles can go here */
        Body {
            Font-family: Arial, sans-serif;
            Text-align: center;
            Padding: 20px;
        }
    </style>
</head>
<body>
    <!—Your HTML content goes here →

    <h1>Welcome to My Project</h1>
    <p>This is a simple HTML & CSS project.</p>

    <!—Include your JavaScript for alerts →
    <script>
        // Display a welcome alert
        Alert("Welcome to My Project");

        // Another example alert
```

Alert("This is an alert in the project.");

        // You can add more alerts or other JavaScript functionality as needed

    </script>

</body>

</html>
```


Insert this code into your HTML file, and the alerts will be triggered when the page is loaded. Adjust the content, styles, and JavaScript as per your project's requirements.

6. Practice placement of element in following sections of your project in exercise 5: a. Head b. Body (before your page's HTML) c. Body (inside your page's HTML) d. Body (after your page's HTML).
   Certainly! Here's an example of placing JavaScript elements in different sections of your HTML file:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Alert Placement Example</title>
    <style>
        /* Your CSS styles can go here */
        Body {
            Font-family: Arial, sans-serif;
            Text-align: center;
            Padding: 20px;
        }
    </style>

    <!—JavaScript in the head section →
    <script>
        Alert("This alert is in the head section");
    </script>
</head>
<body>
    <!—JavaScript before the page's HTML →
    <script>
        Alert("This alert is before the page's HTML");
    </script>
```

```
      <!—Your HTML content goes here →

      <h1>Welcome to My Project</h1>
      <p>This is a simple HTML & CSS project.</p>

      <!—JavaScript inside the page's HTML →
      <script>
         Alert("This alert is inside the page's HTML");
      </script>

      <!—JavaScript after the page's HTML →
      <script>
         Alert("This alert is after the page's HTML");
      </script>
   </body>
   </html>
   ```
```

This example includes alerts in different sections:
- Alert in the head section.
- Alert before the page's HTML content.
- Alert inside the page's HTML content.
- Alert after the page's HTML content.

Adjust the placement and content as per your project's needs. Keep in mind that it's often recommended to include JavaScript near the end of the body section for better performance.

7. Declare a variable called username.

Certainly! Here's how you can declare a variable called `username` in JavaScript:

```javascript

Var username;

```

This line declares a variable named `username` using the `var` keyword. You can later assign a value to this variable as needed in your script.

8. Declare a variable called myName & assign to it a string that represents your Full Name.

Certainly! Here's how you can declare a variable called `myName` and assign a string representing your full name:

```javascript
Var myName = "Your Full Name";
```

Replace `"Your Full Name"` with your actual full name. This line declares a variable named `myName` and assigns a string value to it.

9   Write script to

a) Declare a JS variable, titled message.
b) Assign "Hello World" to variable message
c) Display the message in alert box.

Certainly! Here's the script to accomplish the given tasks:

```javascript
// Declare a JS variable titled message
Var message;

// Assign "Hello World" to the variable message
Message = "Hello World";

// Display the message in an alert box
Alert(message);
```

This script declares a variable named `message`, assigns the string "Hello World" to it, and then displays the message in an alert box.

10.Write a script to save student's bio data in JS variables and show the data in

Alert boxes.

Certainly! Here's an example script to save a student's bio data in JavaScript variables and display the data in alert boxes:

```javascript
// Declare variables for student's bio data
Var studentName = "John Doe";
Var age = 20;
Var course = "Computer Science";
Var country = "USA";

// Display student's bio data in alert boxes
Alert("Student Name: " + studentName);
Alert("Age: " + age);
Alert("Course: " + course);
Alert("Country: " + country);
```

Adjust the values accordingly to match the specific bio data of the student. Each `alert` statement will display a different piece of information in a sequence of alert boxes.

11. Declare a variable called email and assign to it a string that represents your

Email Address(e.g. example@example.com). Show the blow mentioned

Message in an alert box.(Hint: use string concatenation)

Certainly! Here's the script to declare a variable called `email` and display a message in an alert box using string concatenation:

```javascript
// Declare a variable called email and assign an email address
Var email = example@example.com;

// Display a message in an alert box using string concatenation
```

Alert("My email address is: " + email);

```
```

This script declares a variable named `email` and assigns the string example@example.com to it. The following `alert` statement then displays a message containing the email address using string concatenation. Adjust the email address as needed.

Certainly! Below are the scripts for tasks 12 to 22:

12. Displaying text in the browser through JS:

```javascript
document.write("This text is displayed in the browser through JavaScript");
```

13. Storing and showing a string in alert and browser:

```javascript
var specialString = "▬▬▬▬▬▬▬▬▬▬ஐ👑۝👑ஐ▬▬▬▬▬▬▬▬▬▬";
alert(specialString);
document.write(specialString);
```

14. Declaring a variable called `age` and showing it in an alert box:

```javascript
var age = 25; // Replace 25 with your actual age
alert("My age is: " + age);
```

15. Keeping track of visitor's visits and displaying the count:

```javascript
var visitCount = 1; // Increment this each time the visitor visits
alert("You have visited this site " + visitCount + " times");
```

16. Declaring a variable called `birthYear` and displaying a message in the browser:

```javascript
var birthYear = 1990; // Replace 1990 with your actual birth year

document.write("My birth year is: " + birthYear);
```

17. Storing and displaying information about a visitor in an online clothing store:

```javascript
var visitorName = "John Doe";

var productTitle = "T-shirt";

var quantity = 5;


document.write(visitorName + " ordered " + quantity + " " + productTitle + "(s) on XYZ Clothing store");
```

18. Declaring 3 variables in one statement:

```javascript
var var1, var2, var3;
```

19. Legal and illegal variable names:

```javascript
// Legal variable names

var myVariable;

var $price;

var _counter;

var camelCaseVariable;

var thisIsALongVariableName;


// Illegal variable names
```

```javascript
// var 1stVariable; // Cannot start with a number

// var my-variable; // Cannot use hyphens

// var var&name; // Cannot use special characters other than $ and _

// var break; // Cannot use reserved keywords

// var for; // Cannot use reserved keywords
```

20. Displaying rules for naming JS variables:

```javascript
document.write("<h1>Rules for naming JS variables</h1>");

document.write("<p>Variable names can only contain letters, numbers, $, and _.</p>");

document.write("<p>Variables must begin with a letter, $, or _. For example $name, _name, or name.</p>");

document.write("<p>Variable names are case-sensitive.</p>");

document.write("<p>Variable names should not be JS keywords.</p>");
```

21. Adding two numbers and showing the result in the browser:

```javascript
var num1 = 5;

var num2 = 10;

var sum = num1 + num2;

document.write("The sum of " + num1 + " and " + num2 + " is: " + sum);
```

22. Performing subtraction, multiplication, division, and modulus:

```javascript
var num1 = 10;

var num2 = 5;


var difference = num1 - num2;
```

```javascript
var product = num1 * num2;

var quotient = num1 / num2;

var modulus = num1 % num2;


document.write("Difference: " + difference + "<br>");

document.write("Product: " + product + "<br>");

document.write("Quotient: " + quotient + "<br>");

document.write("Modulus: " + modulus);
```

These scripts cover a range of JavaScript tasks. Adjust values and details as needed for your specific requirements.

Certainly! Here are the scripts for tasks 23 to 25:

23. Using JS Mathematical Expressions:

```javascript
// a. Declare a variable
Var myVariable;

// b. Show the value of the variable after declaration
Document.write("Value after variable declaration is: " + myVariable + "<br>");

// c. Initialize the variable with some number
myVariable = 5;

// d. Show the initial value of the variable
Document.write("Initial value: " + myVariable + "<br>");

// e. Increment the variable
```

```
myVariable++;

// f. Show the value after increment
Document.write("Value after increment is: " + myVariable + "<br>");

// g. Add 7 to the variable
myVariable += 7;

// h. Show the value after addition
Document.write("Value after addition is: " + myVariable + "<br>");

// i. Decrement the variable
myVariable--;

// j. Show the value after decrement
Document.write("Value after decrement is: " + myVariable + "<br>");

// k. Show the remainder after dividing the variable's value by 3
Var remainder = myVariable % 3;

// l. Show the remainder
Document.write("The remainder is: " + remainder);
```

24. Cost of one movie ticket and calculating the cost of buying 5 tickets:

```javascript
// Cost of one movie ticket
Var ticketPrice = 600;

// Calculate the cost of buying 5 tickets
```

Var totalCost = ticketPrice * 5;

// Display the total cost

Document.write("Total cost to buy 5 movie tickets is: " + totalCost + " PKR");
```

25. Displaying the multiplication table of any number (let's take 7 as an example):

```javascript
// Number for multiplication table
Var number = 7;

// Display multiplication table
For (var i = 1; i <= 10; i++) {
    Document.write(number + " x " + i + " = " + (number * i) + "<br>");
}
```

Adjust values and details as needed for your specific requirements.