

Cal.php

<?php

// a) Simple Calculator with HTML Interfacing

```
if (isset($_POST['calculate'])) {  
    $num1 = $_POST['num1'];  
    $num2 = $_POST['num2'];  
    $operator = $_POST['operator'];  
    $result = "";  
  
    switch ($operator) {  
        case '+':  
            $result = $num1 + $num2;  
            break;  
        case '-':  
            $result = $num1 - $num2;  
            break;  
        case '*':  
            $result = $num1 * $num2;  
            break;  
        case '/':  
            if ($num2 == 0) {  
                $result = "Division by zero!";  
            } else {  
                $result = $num1 / $num2;  
            }  
            break;  
        default:  
            $result = "Invalid operator";  
    }  
}  
?  

```

<!DOCTYPE html>

```

<html>

<head>

    <title>Simple Calculator</title>

</head>

<body>

    <h1>Simple Calculator</h1>

    <form method="post">

        <input type="number" name="num1" required placeholder="Enter number 1"><br><br>

        <select name="operator">

            <option value="+">+</option>

            <option value="-">-</option>

            <option value=""></option>

            <option value="/">/</option>

        </select><br><br>

        <input type="number" name="num2" required placeholder="Enter number 2"><br><br>

        <button type="submit" name="calculate">Calculate</button>

    </form>


    <?php if (isset($result)): ?>

        <h2>Result: <?php echo $result; ?></h2>

    <?php endif; ?>

</body>

</html>

```

Cookie.php

```

<?php

// b) Store date-time in COOKIE and display "Last visited on"


$lastVisit = isset($_COOKIE['last_visit']) ? $_COOKIE['last_visit'] : "First visit!";

setcookie('last_visit', date("Y-m-d H:i:s"), time() + (365 * 24 * 60 * 60)); // Cookie expires in 1 year


?>

```

```

<!DOCTYPE html>

```

```

<html>

```

```

<head>

```

```
<title>Last Visit</title>

</head>

<body>

    <h1>Welcome!</h1>

    <p>Last visited on: <?php echo $lastVisit; ?></p>

</body>

</html>
```

Visitor.php

```
<?php

// c) Track and display visitor count
```

```
$countFile = "visitor_count.txt";

if (file_exists($countFile)) {

    $count = (int)file_get_contents($countFile);

} else {

    $count = 0;

}
```

```
$count++;

file_put_contents($countFile, $count);
```

```
?>
```

```
<!DOCTYPE html>

<html>

<head>

    <title>Visitor Count</title>

</head>

<body>

    <h1>Welcome!</h1>

    <h2>You are visitor number: <?php echo $count; ?></h2>

</body>

</html>
```

User.php

```
<?php
```

```
// d) Validate username and password
```

```
if (isset($_POST['submit'])) {
```

```
    $username = $_POST['username'];
```

```
    $password = $_POST['password'];
```

```
    $errors = [];
```

```
    if (strlen($username) < 6) {
```

```
        $errors[] = "Username must be at least 6 characters.";
```

```
    }
```

```
    if (strlen($password) < 6) {
```

```
        $errors[] = "Password must be at least 6 characters.";
```

```
    }
```

```
    if (empty($errors)) {
```

```
        echo "Login Successful!"; // In a real application, you would verify against a database
```

```
    } else {
```

```
        foreach ($errors as $error) {
```

```
            echo "<p style='color:red;'>$error</p>";
```

```
        }
```

```
    }
```

```
}
```

```
?>
```

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
    <title>Login Form</title>
```

```
</head>
```

```
<body>
```

```
    <h1>Login</h1>
```

```
    <form method="post">
```

Username: <input type="text" name="username" required>

Password: <input type="password" name="password" required>

<button type="submit" name="submit">Submit</button>

</form>

</body>

</html>