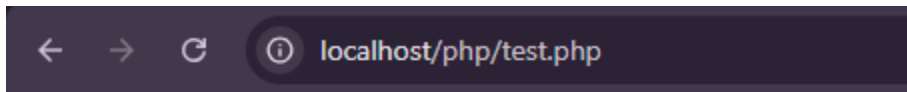**Write a program in php to calculate a factorial.**

```php
<?php
function factorial_iterative($n) {
    if ($n < 0) {
        return "Invalid input: factorial is not defined for negative
numbers.";
    }

    $factorial = 1;
    for ($i = 1; $i <= $n; $i++) {
        $factorial *= $i;
    }
    return $factorial;
}

$number = 5; // You can change this number
echo "Factorial of $number is: " . factorial_iterative($number);
?>
```

Output

Factorial of 5 is: 120

Write a program in php which tacks user in php name and email id and display it on another page.

Form.php

```
<!DOCTYPE html>
<html>
<head>
    <title>User Form</title>
</head>
<body>
    <h2>Enter Your Details</h2>
    <form action="display.php" method="post">
        Name: <input type="text" name="name" required><br><br>
        Email: <input type="email" name="email" required><br><br>
        <input type="submit" value="Submit">
    </form>
</body>
</html>
```
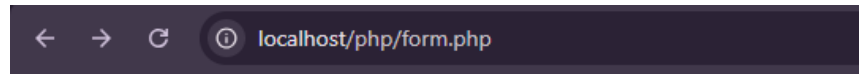
Display.php

```php
<?php
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $name = htmlspecialchars($_POST["name"]);
    $email = htmlspecialchars($_POST["email"]);
} else {
    echo "Invalid request.";
    exit;
}
?>

<!DOCTYPE html>
<html>
<head>
    <title>Display User Info</title>
</head>
<body>
    <h2>User Details</h2>
    <p><strong>Name:</strong> <?php echo $name; ?></p>
    <p><strong>Email:</strong> <?php echo $email; ?></p>
</body>
</html>
```
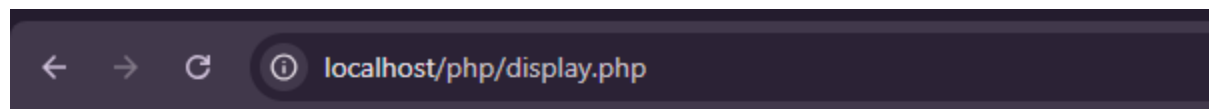
Output

Enter Your Details

Name: akshad

Email: akshad@gmail.com

Submit

User Details

Name: akshad

Email: akshad@gmail.com

Write a program in php which tacks two integer number from user and calculate addition on another page .

Form.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Add Two Numbers</title>
</head>
<body>
    <h2>Enter Two Numbers</h2>
    <form action="display.php" method="post">
        Number 1: <input type="number" name="num1" required><br><br>
        Number 2: <input type="number" name="num2" required><br><br>
        <input type="submit" value="Calculate Sum">
    </form>
</body>
</html>
```

Display.php

```
<?php
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $num1 = (int) $_POST['num1'];
    $num2 = (int) $_POST['num2'];
    $sum = $num1 + $num2;
} else {
    echo "Invalid request.";
    exit;
}
?>

<!DOCTYPE html>
<html>
<head>
    <title>Sum Result</title>
</head>
<body>
    <h2>Result</h2>
    <p><strong>Number 1:</strong> <?php echo $num1; ?></p>
    <p><strong>Number 2:</strong> <?php echo $num2; ?></p>
    <p><strong>Sum:</strong> <?php echo $sum; ?></p>
</body>
</html>
```

Output

Enter Two Numbers

Number 1: `12`

Number 2: `18`

Calculate Sum

Result

Number 1: 12

Number 2: 18

Sum: 30

Write a program in php which tacks username and user id from the user and display the content on the same page

```php
<!DOCTYPE html>
<html>
<head>
    <title>User Info Form</title>
</head>
<body>

    <h2>Enter Your Details</h2>
    <form method="post" action="">
        Username: <input type="text" name="username" required><br><br>
        User ID: <input type="number" name="userid" required><br><br>
        <input type="submit" value="Submit">
    </form>

    <?php
    if ($_SERVER["REQUEST_METHOD"] == "POST") {
        // Sanitize input
        $username = htmlspecialchars($_POST["username"]);
        $userid = htmlspecialchars($_POST["userid"]);

        // Display output
        echo "<h3>User Information:</h3>";
        echo "<p><strong>Username:</strong> $username</p>";
        echo "<p><strong>User ID:</strong> $userid</p>";
    }
    ?>

</body>
</html>
```

Output

localhost/php/form.php

Enter Your Details

Username: akshad

User ID: 28

Submit

User Information:

Username: akshad

User ID: 28

Write a program in php to display data and records of tables which is already existing in MYSQL database.

```php
<?php

// Step 1: Database connection parameters

$host = "localhost";

$user = "root";        // default for XAMPP

$password = "";        // default is empty in XAMPP

$dbname = "testdb";    // your database name


// Step 2: Create connection

$conn = new mysqli($host, $user, $password, $dbname);


// Step 3: Check connection

if ($conn->connect_error) {

    die("Connection failed: " . $conn->connect_error);

}


// Step 4: Run query to fetch data

$sql = "SELECT id, username, email FROM users";

$result = $conn->query($sql);


// Step 5: Display results

if ($result->num_rows > 0) {

    echo "<h2>User Records:</h2>";

    echo "<table border='1' cellpadding='10'>";

    echo "<tr><th>ID</th><th>Username</th><th>Email</th></tr>";
```

```php
    while ($row = $result->fetch_assoc()) {

        echo "<tr>

                <td>{$row['id']}</td>

                <td>{$row['username']}</td>

                <td>{$row['email']}</td>

            </tr>";

    }



    echo "</table>";

} else {

    echo "No records found.";

}



// Step 6: Close connection

$conn->close();

?>
```

Output

User Records:

ID	Username	Email
1	Alice	alice@example.com
2	Bob	bob@example.com

Write a program in php to perform CRUD operation on database this application should allow user to add, update, delete or retrieve record from MYSQL database.(table is not existing in MYSQL perform through button)

```php
<?php

// DB connection config

$host = "localhost";

$user = "root";

$password = "";

$dbname = "testdb";


// Create DB connection

$conn = new mysqli($host, $user, $password, $dbname);


// Check connection

if ($conn->connect_error) {

    die("Connection failed: " . $conn->connect_error);

}


// Create table if requested

if (isset($_POST['create_table'])) {

    $createTableSQL = "CREATE TABLE IF NOT EXISTS users (

        id INT AUTO_INCREMENT PRIMARY KEY,

        username VARCHAR(50) NOT NULL,

        email VARCHAR(100) NOT NULL

    )";

    if ($conn->query($createTableSQL)) {

        echo "<p style='color:green;'>Table created successfully!</p>";
```

```php
    } else {

        echo "<p style='color:red;'>Error creating table: " . $conn->error
. "</p>";

    }

}


// Add record

if (isset($_POST['add'])) {

    $username = $_POST['username'];

    $email = $_POST['email'];

    $sql = "INSERT INTO users (username, email) VALUES ('$username',
'$email')";

    $conn->query($sql);

}


// Delete record

if (isset($_GET['delete'])) {

    $id = $_GET['delete'];

    $conn->query("DELETE FROM users WHERE id=$id");

    header("Location: crud_app.php");

    exit;

}


// Fetch data for update

$edit = false;

$edit_id = "";

$edit_username = "";

$edit_email = "";
```

```php
if (isset($_GET['edit'])) {

    $edit = true;

    $edit_id = $_GET['edit'];

    $result = $conn->query("SELECT * FROM users WHERE id=$edit_id");

    if ($result->num_rows == 1) {

        $row = $result->fetch_assoc();

        $edit_username = $row['username'];

        $edit_email = $row['email'];

    }

}


// Update record

if (isset($_POST['update'])) {

    $id = $_POST['id'];

    $username = $_POST['username'];

    $email = $_POST['email'];

    $conn->query("UPDATE users SET username='$username', email='$email'
WHERE id=$id");

    header("Location: crud_app.php");

    exit;

}
?>


<!DOCTYPE html>

<html>

<head>

    <title>PHP CRUD App</title>
```

```php
</head>

<body>

    <h2>Simple PHP CRUD with MySQL</h2>


    <!-- Create Table Button -->

    <form method="post">

        <input type="submit" name="create_table" value="Create Table If
Not Exists">

    </form>



    <h3><?php echo $edit ? "Update Record" : "Add New Record"; ?></h3>

    <form method="post">

        <?php if ($edit): ?>

            <input type="hidden" name="id" value="<?php echo $edit_id;
?>">

        <?php endif; ?>

        Username: <input type="text" name="username" value="<?php echo
$edit_username; ?>" required>

        Email: <input type="email" name="email" value="<?php echo
$edit_email; ?>" required>

        <input type="submit" name="<?php echo $edit ? "update" : "add";
?>" value="<?php echo $edit ? "Update" : "Add"; ?>">

    </form>



    <h3>Existing Records</h3>

    <table border="1" cellpadding="10">

        <tr>

            <th>ID</th><th>Username</th><th>Email</th><th>Actions</th>

        </tr>

        <?php
```

```php
        $result = $conn->query("SELECT * FROM users");

        while ($row = $result->fetch_assoc()):

        ?>

        <tr>

            <td><?php echo $row['id']; ?></td>

            <td><?php echo htmlspecialchars($row['username']); ?></td>

            <td><?php echo htmlspecialchars($row['email']); ?></td>

            <td>

                <a href="crud_app.php?edit=<?php echo $row['id'];
?>">Edit</a> |

                <a href="crud_app.php?delete=<?php echo $row['id']; ?>"
onclick="return confirm('Delete this record?');">Delete</a>

            </td>

        </tr>

        <?php endwhile; ?>

    </table>

</body>

</html>
```
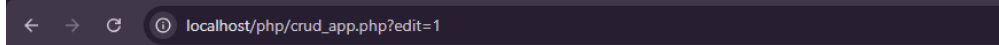
Output