1. Write a PHP function to calculate the factorial of a given number. Take input from user.

<!DOCTYPE HTML>

<html>

<head>

<title>Factorial in PHP</title>

</head>

<body>

<form method="post">

    Enter the Number:<br>

    <input type="number" name="number" id="number">

    <input type="submit" name="submit" value="Submit" />

</form>

<?php

$servername = "localhost";

        $username = "root";

        $password = "";

        $dbname = "Factorial";

        $conn = new *mysqli*($servername, $username, $password, $dbname);

        if ($conn->connect\_error) {

          die("Connection failed: " . $conn->connect\_error);

        }

        $sql = "SELECT \* FROM fact";

        $result = $conn->query($sql);

        if ($result->num\_rows > 0) {

          echo "<h3>Result:</h3>";

          echo "<ul>";

          while ($row = $result->fetch\_assoc()){

        }

        echo"</ul>";

    if($\_POST){

        $fact = 1;

        $number = $\_POST['number'];

        echo "Factorial of $number:<br><br>";

        for ($i = 1; $i <= $number; $i++){

            $fact = $fact \* $i;

            }

            echo $fact . "<br>";

    }

?>

</body>

</html>

<?php

*function* fact ($n)

{

    if($n <= 1)

    {

        return 1;

    }

    else

    {

        return $n \* fact($n - 1);

    }

}

echo "Factorial of 6 is " .fact(6);

$conn->close();

?>

</body>

</html>

Output:

A screenshot of a computer

Description automatically generated

1. Create a PHP script to validate a user's input and display an error message if the input is empty.

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Document</title>

</head>

<body>

    <form action="invalid.php" method="post">

    Name:

    <input type="text" name="name" required>

   password:

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

    <input type="submit" value="submit" name="btn">

      <?php

      $name=$\_POST[‘name’];

Echo “successful”;

      ?>

</body>

</html>

Output:

A screenshot of a computer

Description automatically generated