DOCTORHARISINGHGOUR VISHWAVIDYALAYA DEPARTMENTOFCOMPUTER APPLICATIONS



CSA-CC-3206: WEB

APPLICATION LAB

SESSION: 2024-2025

SUBMITTED BY

SUBMITTEDTO

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1. WRITE INSTALLATION STEPS OF XAMPP

Here are the steps to install XAMPP on a Windows machine:

Step 1: Download XAMPP

- 1. Visit the [official XAMPP website](https://www.apachefriends.org/index.html).
- 2. Choose the version of XAMPP based on your operating system (Windows, Linux, or macOS).
- 3. Click the "Download" button for the latest version.

Step 2: Run the Installer

- 1. Once the download is complete, locate the downloaded file (e.g., `xampp-windows-x.x.x-installer.exe` for Windows).
- 2. Double-click the installer to run it.
- 3. If prompted by User Account Control (UAC), click "Yes" to allow the installer to make changes to your device.

Step 3: Select Components

- 1. The installer will open a setup wizard.
- 2. Click "Next" on the initial welcome screen.
- 3. You'll be asked to select the components you want to install (e.g., Apache, MySQL, PHP, Perl). By default, all components are selected. You can leave them checked or uncheck any components you don't need.
- 4. Click "Next."

Step 4: Choose Installation Folder

- 1. Choose the folder where XAMPP should be installed. By default, it installs in `C:\xampp`.
- 2. Click "Next."

Step 5: Language Selection

- 1. Select the language for XAMPP's interface (English or your preferred language).
- 2. Click "Next."

Step 6: Begin Installation

- 1. Click "Next" to start the installation process.
- 2. Wait for the installation to complete. This may take a few minutes depending on your system.

Step 7: Start the XAMPP Control Panel

- 1. Once the installation is complete, check the box to launch the XAMPP Control Panel.
- 2. Click "Finish."

Step 8: Run Apache and MySQL

- 1. In the XAMPP Control Panel, you'll see a list of services (Apache, MySQL, FileZilla, etc.).
- 2. Click the "Start" button next to Apache and MySQL to start the web server and database server.
- 3. If the services start successfully, the module names will turn green.

Step 9: Test the Installation

1. Open your web browser.

- 2. Type `http://localhost` or `http://127.0.0.1` in the address bar and hit Enter.
- 3. If XAMPP is installed correctly, the XAMPP dashboard will appear, confirming a successful setup.

Optional: Configure Services to Start Automatically

- 1. If you want Apache and MySQL to start automatically when you launch XAMPP, check the "Svc" checkbox next to each service in the Control Panel.
- 1.

2. WAP IN PHPTOPRINTHELLOMESSAGEWITHGUI.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <metacharset="UTF-8">
  <metaname="viewport"content="width=device-width,initial-scale=1.0">
  <title>PHP-Hello,World!</title>
  <style>
    body{
      display:flex;
      justify-content:center;
      align-items: center;
      height: 100vh;
      background-color: #f0f0f0;
      font-family: Arial, sans-serif;
    }
    h1{
      color:#333;
    }
  </style>
</head>
<body>
  <h1><?phpecho'Hello,World!';?></h1>
</body>
</html>
               Hello, World!
```

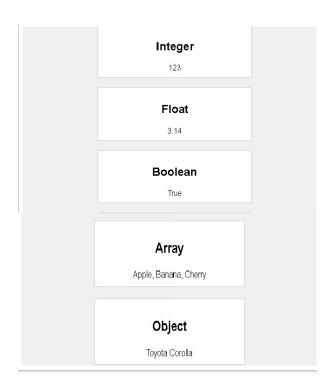
3. WAPINPHPTOSHOW USEOFDATATYPESINPHPWITHGUI.

```
<!DOCTYPE html>
<html lang="en">
<head>
```

```
<metacharset="UTF-8">
<metaname="viewport"content="width=device-width,initial-scale=1.0">
<title>PHPDataTypes</title>
<style>
```

```
body{
      display:flex;
      flex-direction:column;
      align-items: center;
      justify-content:center;
      height: 100vh;
      background-color: #f0f0f0;
      font-family: Arial, sans-serif;
    }
    .datatype {
      margin: 10px;
      padding:10px;
      border: 1px solid #ccc;
      background-color:#fff;
      width: 300px;
      text-align:center;
    }
  </style>
</head>
<body>
  <divclass="datatype">
    <h2>String</h2>
    <?php
      $string="Hello,World!";
      echo $string;
    ?>
  </div>
  <divclass="datatype">
    <h2>Integer</h2>
    <?php
      $integer=123;
      echo $integer;
    ?>
  </div>
  <divclass="datatype">
    <h2>Float</h2>
    <?php
      $float=3.14;
      echo $float;
    ?>
  </div>
  <divclass="datatype">
```

```
<h2>Boolean</h2>
    <?php
      $boolean= true;
      echo$boolean?'True':'False';
    ?>
  </div>
  <divclass="datatype">
    <h2>Array</h2>
    <?php
      $array=array("Apple","Banana","Cherry"); echo
      implode(", ", $array);
    ?>
  </div>
  <divclass="datatype">
    <h2>Object</h2>
    <?php
      class Car
        {public$make
        public$model;
        publicfunctionconstruct($make,$model){
          $this->make=$make;
          $this->model=$model;
        }
      }
      $car = new Car("Toyota", "Corolla");
       echo$car->make."".$car->model;
    ?>
  </div>
</body>
</html>
```



4. WAP IN PHPTOSHOW USEOFOPERATORSINPHPWITHGUI.

```
<!DOCTYPE html>
<html lang="en">
<head>
  <metacharset="UTF-8">
  <metaname="viewport"content="width=device-width,initial-scale=1.0">
  <title>PHPOperators</title>
  <style>
    body{
      display:flex;
      flex-direction:column;
      align-items: center;
      justify-content:center;
      height: 150vh;
      background-color: #f0f0f0;
      font-family: Arial, sans-serif;
    }
    .operator {
      margin: 10px;
      padding:10px;
      border: 1px solid #ccc;
      background-color:#fff;
      width: 300px;
```

```
text-align:center;
   }
 </style>
</head>
<body>
   <divclass="operator">
    <h2>Addition</h2>
    <?php
      $a= 10;
      $b =20;
      $sum=$a+$b;
      echo"$a +$b = $sum";
    ?>
  </div>
  <divclass="operator">
    <h2>Subtraction</h2>
    <?php
      $sub=$a -$b;
      echo"$a -$b =$sub";
    ?>
  </div>
  <divclass="operator">
    <h2>Multiplication</h2>
    <?php
      $mul=$a* $b;
      echo"$a *$b = $mul";
    ?>
  </div>
  <divclass="operator">
    <h2>Division</h2>
    <?php
      $div=$a/$b;
      echo"$a /$b= $div";
    ?>
  </div>
   <divclass="operator">
    <h2>Modulus</h2>
    <?php
      $mod=$a%$b;
      echo"$a %$b= $mod";
    ?>
  </div>
```

```
</body>
</html>

Addition

10 + 20 = 30

Subtraction

10 - 20 = -10

Multiplication

10* 20 = 200

Division

10 / 20 = 0.5

Modulus
```

5. WAP INPHPTOSHOW USE OFIFELSE STATEMENTWITHGUI.

10 % 20 = 10

```
height:100vh;
      background-color: #f0f0f0;
      font-family: Arial, sans-serif;
    }
    .result{
      margin: 10px;
      padding:
      10px;border:1pxsolid
      #ccc;
      background-color:#fff;
      width: 300px;
      text-align:center;
    }
  </style>
</head>
<body>
  <divclass="result">
    <h2>CheckNumber</h2>
    <?php
      $number=10;//Changethisnumbertotestdifferentconditions if
      ($number > 0) {
        echo"$numberisapositive number.";
      }elseif($number<0) {</pre>
        echo"$numberis anegativenumber.";
      }else{
        echo"$numberis zero.";
      }
    ?>
  </div>
</body>
</html>
           Check Number
            10 is a positive number.
```

6. WAPIN PHPTOSHOWUSEOFSWITCHSTATEMENTWITH GUI.

```
<!DOCTYPE html>
<html lang="en">
<head>
```

```
<metacharset="UTF-8">
  <metaname="viewport"content="width=device-width,initial-scale=1.0">
  <title>PHPSwitchStatement</title>
  <style>
    body{
      display:flex;
      flex-direction:column;
      align-items: center;
      justify-content:center;
      height: 100vh;
      background-color: #f0f0f0;
      font-family: Arial, sans-serif;
    }
    .result{
      margin: 10px;
      padding:
      10px;border:1pxsolid
      #ccc;
      background-color:#fff;
      width: 300px;
      text-align:center;
    }
  </style>
</head>
<body>
 <divclass="result">
    <h2>Dayofthe Week</h2>
    <?php
      $day=date("I");//Getthecurrentdayoftheweek switch
      ($day) {
        case"Monday":
          echo"TodayisMonday.Startoftheworkweek!"; break;
        case"Tuesday":
          echo"TodayisTuesday.Keepgoing!"; break;
        case"Wednesday":
          echo"TodayisWednesday.Halfwaythrough!"; break;
        case"Thursday":
          echo"TodayisThursday.Almostthere!";
          break;
        case"Friday":
```

```
echo"TodayisFriday.Weekendisnear!"; break;
case"Saturday":
    echo"TodayisSaturday.Enjoyyourweekend!";
    break;
case"Sunday":
    echo"TodayisSunday.Relaxandrecharge!"; break;
default:
    echo"Unknownday!"; break;

}
?>
</div>
</body>
</html>
```

Day of the Week

Today is Monday. Start of the work week!

7. WAPIN PHPTOSHOWUSEOFWHILELOOPWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
    <title>WhileLoopExample</title>
    <tstyle>
        body{
            font-family:Arial,sans-serif;
            text-align: center;
            margin-top:50px;
        }
        .number{
            font-size:24px;
            margin: 10px;
        }
        </style>
</head>
<body>
```

```
<h1>Numbersfrom1to 10</h1>
<!php
$count= 1;
while($count<=10){
    echo"<divclass='number'>$count</div>";
    $count++;
}
?>
</body>
</html>
```

Numbers from 1 to 10

8. WAPIN PHPTOSHOWUSEOFDOWHILELOOPWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
    <title>DoWhileLoopExample</title>
    <style>
        body{
            font-family:Arial,sans-serif;
            text-align: center;
            margin-top:50px;
        }
        .number{
            font-size:24px;
            margin: 10px;
        }
        </style>
```

```
</head>
<body>
    <h1>Numbersfrom1to 10</h1>
    <?php
    $count=1; do
    {
        echo"<divclass='number'>$count</div>";
        $count++;
    }while($count<=10);
    ?>
</body>
</html>
```

Numbers from 1 to 10

25. 10.

9. WAP IN PHPTOSHOWUSEOFFORLOOPWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
    <title>ForLoopExample</title>
    <style>
        body{
            font-family:Arial,sans-serif;
            text-align: center;
            margin-top:50px;
        }
        .number{
            font-size:24px;
            margin: 10px;
        }
}
```

```
</style>
</head>
<body>
<h1>Numbersfrom1to 10</h1>
<?php
for ($count = 1; $count <= 10; $count++) {
    echo"<divclass='number'>$count</div>";
}
?>
</body>
</html>
```

Numbers from 1 to 10

~

10. WAP IN PHPTOSHOWUSEOFFOREACHLOOPWITH GUI.

```
<!DOCTYPE html>
<html>
<head>
    <title>ForeachLoopExample</title>
    <tstyle>
        body{
            font-family:Arial,sans-serif;
            text-align: center;
            margin-top:50px;
        }
        .color{
            font-size:24px;
```

```
margin:10px;
}
</style>
</head>
<body>
<h1>ListofColors</h1>
<?php
$colors=array("Red","Green","Blue","Yellow","Purple");
foreach ($colors as $color) {
    echo"<divclass='color'>$color</div>";
}
?>
</body>
</html>
```

List of Colors

Red

Green

Blue

Yellow

Purple

11. WAP IN PHPTOCHECKEVEN ORODDNUMBERWITH GUI.

```
<!DOCTYPE html>
<html>
<head>
  <title>EvenorOddNumber Checker</title>
  <style>
    body{
      font-family: Arial, sans-serif;
      text-align: center;
      margin-top:50px;
    }
    .result{
      font-size:24px;
      margin: 10px;
    }
  </style>
</head>
```

```
<body>
 <h1>CheckEvenorOdd Number</h1>
 <formmethod="post"onsubmit="returncheckNumber()">
    <inputtype="number"id="number"name="number"required>
    <inputtype="submit"value="Check">
  </form>
  <script>
   functioncheckNumber(){
     varnumber=document.getElementById("number").value; if
     (number \% 2 == 0) {
       alert(number+"isanEvennumber.");
     }else{
       alert(number+"isanOddnumber.");
     }
     returnfalse;//Preventformsubmission
   }
  </script>
</body>
</html>
```

Check Even or Odd Number

1000	
1173	Check
2025	

An embedded page at try.w3schools.com says

173 is an Odd number.

οĸ

12. WAP IN PHPTOCHECKPRIMENUMBERORNOTWITH GUI.

```
<!DOCTYPE html>
<html>
<head>
    <title>PrimeNumberChecker</title>
    <style>
        body{
            font-family:Arial,sans-serif;
            text-align: center;
```

```
margin-top:50px;
   }
    .result{
      font-size:24px;
      margin: 10px;
   }
 </style>
</head>
<body>
  <h1>CheckPrimeNumber</h1>
 <formonsubmit="returncheckPrime()">
    <inputtype="number"id="number"name="number"required>
    <inputtype="submit"value="Check">
  </form>
  <script>
    functionisPrime(number){ if
      (number <= 1) {
        return false;
      for(leti=2;i<=Math.sqrt(number);i++){ if
        (number % i === 0) {
          return false;
        }
      }
      returntrue;
    }
    functioncheckPrime(){
      constnumber=document.getElementById("number").value; if
      (isPrime(number)) {
        alert(number+" isaPrime number.");
      }else{
        alert(number+" isnotaPrimenumber.");
      returnfalse;//Preventformsubmission
   }
 </script>
</body>
</html>
```

Check Prime Number

173	Check
An embedded page at try.w3s	schools.com says
173 is a Prime number.	
	ок

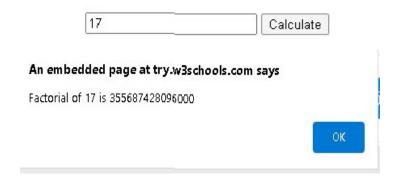
13. WAPIN PHPTOFINDFACTORIAL OF ANUMBER WITHGUI.

```
<!DOCTYPE html>
<html>
<head>
  <title>FactorialCalculator</title>
  <style>
    body{
      font-family:Arial,sans-serif;
      text-align: center;
      margin-top:50px;
    }
    .result{
      font-size:24px;
      margin: 10px;
    }
  </style>
</head>
<body>
  <h1>FactorialCalculator</h1>
  <formonsubmit="returncalculateFactorial()">
    <inputtype="number"id="number"name="number"required>
    <inputtype="submit"value="Calculate">
  </form>
  <script>
    functionfactorial(number){ if
      (number <= 1) {
```

```
return1;
}else{
    returnnumber*factorial(number-1);
}

functioncalculateFactorial(){
    constnumber=document.getElementById("number").value;
    const result = factorial(number);
    alert("Factorialof"+number+"is"+result); return
    false; // Prevent form submission
}
</script>
</body>
</html>
```

Factorial Calculator



14. WAPINPHPTOCHECKSTRONG NUMBER ORNOTWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
    <title>StrongNumberChecker</title>
    <style>
        body{
            font-family:Arial,sans-serif;
            text-align: center;
            margin-top:50px;
        }
        .result{
```

```
font-size:24px;
      margin: 10px;
   }
  </style>
</head>
<body>
  <h1>CheckStrongNumber</h1>
 <formonsubmit="returncheckStrongNumber()">
    <inputtype="number"id="number"name="number"required>
    <inputtype="submit"value="Check">
  </form>
  <script>
    functionfactorial(num){
      if(num===0||num===1){
        return 1;
      }else{
        returnnum*factorial(num-1);
      }
   }
    functionisStrongNumber(num){
      let sum = 0;
      let temp = num;
      while(temp>0){
        let digit = temp % 10;
        sum+=factorial(digit);
        temp=Math.floor(temp/10);
      }
      returnsum===num;
    }
    functioncheckStrongNumber() {
      constnumber=parseInt(document.getElementById("number").value); if
      (isStrongNumber(number)) {
        alert(number+" isaStrong number.");
      }else{
        alert(number+" isnotaStrongnumber.");
      returnfalse;//Preventformsubmission
 </script>
</body>
```

Check Strong Number

[145] \$ Check	145	≎ Check
------------------	-----	---------

An embedded page at try.w3schools.com says

145 is a Strong number.

O**K**

15. WAP IN PHPTOCHECKPALLINDROMENUMBERORNOTWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
 <title>PalindromeNumberChecker</title>
  <style>
    body{
      font-family: Arial, sans-serif;
      text-align: center;
      margin-top:50px;
    }
    .result{
      font-size:24px;
      margin: 10px;
    }
  </style>
</head>
<body>
 <h1>CheckPalindromeNumber</h1>
 <formonsubmit="returncheckPalindrome()">
    <inputtype="number"id="number"name="number"required>
    <inputtype="submit"value="Check">
  </form>
  <script>
    function isPalindrome(number) {
      constoriginalNumber=number; let
      reversedNumber = 0;
```

```
while(number>0) {
        constdigit=number% 10;
        reversedNumber=reversedNumber*10+digit; number
        = Math.floor(number / 10);
     }
     returnoriginalNumber===reversedNumber;
   }
   functioncheckPalindrome(){
     constnumber=parseInt(document.getElementById("number").value); if
     (isPalindrome(number)) {
        alert(number+"isaPalindrome number.");
     }else{
        alert(number+"isnotaPalindrome number.");
     }
     returnfalse;//Preventformsubmission
   }
 </script>
</body>
</html>
```

Check Palindrome Number



An embedded page at try.w3schools.com says

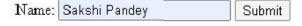
14541 is a Palindrome number.



16. WAPIN PHPTOSHOWUSERDEFINEDFUNCTIONWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
    <title>User-DefinedFunctionExample</title>
</head>
<body>
```

Enter Your Name



An embedded page at try.w3schools.com says

Hello, Sakshi Pandey! Welcome to our website.

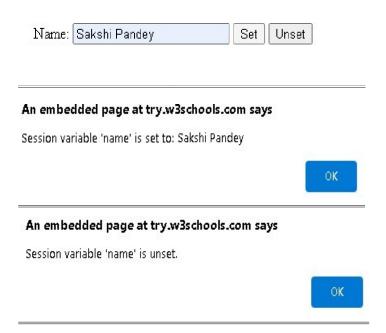
ок

17. WAPIN PHPTOSHOWSET()FUNCTIONANDUNSET()FUNCTIONWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
    <title>SetandUnsetExample</title>
</head>
<body>
<h2>SetandUnsetSessionVariables</h2>
<formonsubmit="returnhandleFormSubmit(event)">
    <label for="name">Name:</label>
    <inputtype="text"id="name"name="name"required>
    <inputtype="submit"name="set"value="Set">
```

```
<inputtype="submit"name="unset"value="Unset">
  </form>
  <script>
    function handleFormSubmit(event) {
      event.preventDefault();//Preventformsubmission
      constname=document.getElementById("name").value;
      const action = event.submitter.name;
      if(action==="set"){
        alert("Sessionvariable'name'issetto:"+name);
      } else if (action === "unset")
        {alert("Sessionvariable'name'isunset.");
      }
   }
  </script>
</body>
</html>
```

Set and Unset Session Variables



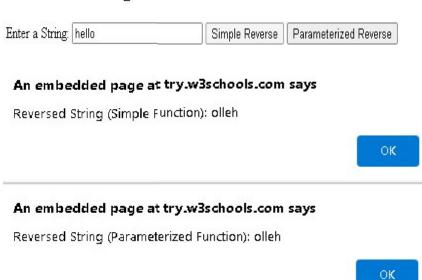
18. <u>WAPINPHPTOREVERSESTRINGUSINGSIMPLEFUNCTIONANDUSINGPARAMETRIZEDFUNC TION WITH GUI.</u>

<!DOCTYPE html>

```
<html>
<head>
  <title>ReverseStringExample</title>
</head>
<body>
  <h2>ReverseaString</h2>
  <formonsubmit="returnhandleFormSubmit(event)">
    <labelfor="inputString">EnteraString:</label>
    <inputtype="text"id="inputString"name="inputString"required>
    <inputtype="submit"name="simpleReverse"value="SimpleReverse">
    <inputtype="submit"name="paramReverse"value="ParameterizedReverse">
  </form>
  <script>
    functionsimpleReverse(str){
      returnstr.split(").reverse().join(");
    }
    functionparamReverse(str){
      let reversed = ";
      for(leti=str.length-1;i>=0;i--){ reversed +=
        str[i];
      returnreversed;
    }
    function handleFormSubmit(event) {
      event.preventDefault();//Preventformsubmission
      constinputString=document.getElementById("inputString").value;
      const action = event.submitter.name;
      letresult;
      if (action === "simpleReverse")
        {result=simpleReverse(inputString);
        alert("ReversedString(SimpleFunction):"+ result);
      }elseif(action==="paramReverse"){
        result=paramReverse(inputString);
        alert("ReversedString(ParameterizedFunction):"+result);
      }
    }
  </script>
```

```
</body>
```

Reverse a String



19. WAP IN PHPTOSHOWUSEOFSTRINGFUNCTIONSWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
  <title>StringFunctionsExample</title>
  <style>
    body{
      font-family:Arial,sans-serif;
      text-align: center;
      margin-top:50px;
  </style>
</head>
<body>
  <h2>StringFunctionsExample</h2>
  <formonsubmit="returnhandleFormSubmit(event)">
    <labelfor="inputString">EnteraString:</label>
    <inputtype="text"id="inputString"name="inputString"required>
    <inputtype="submit"name="strlen"value="StringLength">
    <inputtype="submit"name="strrev"value="ReverseString">
    <inputtype="submit"name="strtoupper"value="UppercaseString">
```

```
</form>
  <script>
    function handleFormSubmit(event) {
      event.preventDefault();//Preventformsubmission
      constinputString=document.getElementById("inputString").value;
      const action = event.submitter.name;
      letresult;
       if(action==="strlen"){
           result="Lengthofthestring:"+inputString.length;
       }elseif(action==="strrev") {
           result="Reversedstring:"+inputString.split(").reverse().join(");
       }elseif(action==="strtoupper") {
          result="Uppercasestring:" +inputString.toUpperCase();
      }
      alert(result);
  </script>
</body>
</html>
```

String Functions Example

Enter a String: I love my India String Length Reverse String Uppercase String

An embedded page at try.w3schools.com says

Length of the string: 15

ОК

An embedded page at try.w3schools.com says

Reversed string: aidnl ym evol I

OK

An embedded page at try.w3schools.com says

Uppercase string: I LOVE MY INDIA

ОК

20. <u>WAPINPHPTOCREATECONSTRUCTORANDINITALIZEA</u> <u>OBJECTOFCLASSBYUSINGOBJECTORIENTED FUNCTION WITH GUI.</u>

```
<!DOCTYPE html>
<html>
<head>
  <title>PHPOOPExample</title>
  <script>
    functionshowAlert(message){
      alert(message);
    }
  </script>
</head>
<body>
 <h2>EnterUserDetails</h2>
 <formid="userForm"onsubmit="returnfalse;">
    Name: <input type="text" id="name" required><br><br>
    Email:<inputtype="email"id="email"required><br><br>
    <inputtype="button"value="Submit"onclick="createUser()">
  </form>
  <script>
    functioncreateUser(){
      varname=document.getElementById('name').value;
      varemail =document.getElementById('email').value;
      //CreateaUser object
      var user = new User(name, email);
      varuserDetails=user.displayUser();
```

```
//Showtheuserdetailsinanalertbox
      showAlert(userDetails);
    }
    //Userclassdefinition
    class User {
      constructor(name,email){
        this.name = name;
        this.email = email;
      }
      displayUser(){
        return"Name:"+ this.name+"\\nEmail:"+this.email;
      }
    }
  </script>
</body>
</html>
```

Enter User Details

Name: Sakshi Pandey

Email: sakshipandey0902@gmail.co

An embedded page at try.w3schools.com says

Name: Sakshi Pandey\nEmail: sakshipandey0902@gmail.com

ок

21. WAP INPHPTOINHERITMEMBERSOFASUPERCLASSINSUBCLASSWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
    <title>PHPInheritanceExample</title>
    <script>
      functionshowAlert(message){
        alert(message);
```

```
}
  </script>
</head>
<body>
  <h2>EnterAnimalDetails</h2>
  <formid="animalForm"onsubmit="returnfalse;">
    Name: <input type="text" id="name" required><br><br>
    Sound:<inputtype="text"id="sound"required><br><br>
    <inputtype="button"value="Submit"onclick="createAnimal()">
  </form>
  <script>
    functioncreateAnimal(){
      var name = document.getElementById('name').value;
      varsound=document.getElementById('sound').value;
      //CreateaDogobject
      vardog=newDog(name,sound);
      varanimalDetails=dog.displayAnimal();
      //Showtheanimaldetailsinanalertbox
      showAlert(animalDetails);
    }
    //Animalclassdefinition(superclass)
    class Animal {
      constructor(name,sound){
        this.name = name;
        this.sound = sound;
      }
      displayAnimal(){
        return"Animal:"+this.name+"\\nSound:"+this.sound;
      }
    }
    //Dogclassdefinition(subclass)
    class Dog extends Animal {
      constructor(name,sound){
        super(name, sound);// Calltheparentclass constructor
      }
```

```
displayAnimal(){
    return"Animal:"+ this.name+"\\nSound:"+this.sound;
    }
    </script>
</body>
</html>
```

Enter Animal Details

Name: Dog		
Sound: Bar	k	
Submit		

An embedded page at try.w3schools.com says

Animal: Dog\nSound: Bark

ОК

22. WAPIN PHPTOSHOWUSESOFNAMESPACESWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
  <title>PHPNamespaces Example</title>
  <script>
    functionshowAlert(message){
      alert(message);
    }
 </script>
</head>
<body>
 <h2>EnterProductDetails</h2>
 <formid="productForm"onsubmit="returnfalse;">
    Product Name: <input type="text" id="productName" required><br><br>
    ProductPrice:<inputtype="number"id="productPrice"required><br><br>
    <inputtype="button"value="Submit"onclick="createProduct()">
  </form>
  <script>
```

```
functioncreateProduct(){
     varname=document.getElementById('productName').value; var
     price = document.getElementById('productPrice').value;
     //CreateaProductobject
     varproduct=newStore.Product(name,price);
     varproductDetails= product.displayProduct();
     //Showtheproductdetailsinanalertbox
     showAlert(productDetails);
   }
   //DefinetheStorenamespace var
   Store = Store | | {};
   //ProductclassdefinitionwithintheStorenamespace Store.Product =
   class {
     constructor(name,price){
       this.name = name;
       this.price = price;
     }
     displayProduct(){
         }
   };
 </script>
</body>
</html>
```

Enter Product Details

100 100 100000 1		
Product Price:	120	

An embedded page at try.w3schools.com says

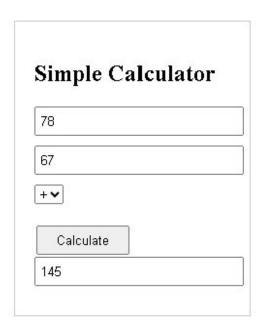
Product Name: Sugar\nProduct Price: 120

ОК

23. WAPIN PHPTOIMPLEMENTCALCULATORWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
  <title>PHPCalculator</title>
  <style>
    .calculator {
      border:1pxsolid#ccc;
      padding: 20px;
      width: 200px;
      margin:0auto;
    .calculatorinput[type="text"]{
      width: 100%;
      margin-bottom:10px;
      padding: 5px;
    }
    .calculatorinput[type="button"]{
      width: 48%;
      padding:5px;
      margin: 1%;
    }
  </style>
  <script>
    functioncalculate(){
      varnum1= parseFloat(document.getElementById('num1').value);
```

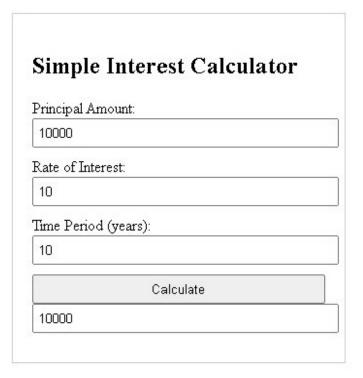
```
varnum2=parseFloat(document.getElementById('num2').value); var
      operator = document.getElementById('operator').value;
      varresult;
      if (operator === '+') {
        result=num1+num2;
      }elseif(operator==='-'){
        result = num1 - num2;
      }elseif(operator==='*'){
        result = num1 * num2;
      }elseif(operator==='/'){
        result = num1 / num2;
      }
      document.getElementById('result').value=result;
   }
 </script>
</head>
<body>
 <divclass="calculator">
    <h2>SimpleCalculator</h2>
   <formonsubmit="returnfalse;">
      <inputtype="text"id="num1"placeholder="Enterfirstnumber"required><br>
      <inputtype="text"id="num2"placeholder="Entersecondnumber"required><br>
      <selectid="operator"required>
        <optionvalue="+">+</option>
        <optionvalue="-">-</option>
        <optionvalue="*">*</option>
        <optionvalue="/">/</option>
      </select><br><br>
      <inputtype="button"value="Calculate"onclick="calculate()">
      <inputtype="text"id="result"placeholder="Result"readonly><br>
    </form>
  </div>
</body>
</html>
```



24. WAPIN PHPTOCALCULATESIMPLEINTERESTWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
  <title>SimpleInterestCalculator</title>
  <style>
    .calculator {
      border:1pxsolid#ccc;
      padding: 20px;
      width: 300px;
      margin:0auto;
    .calculatorinput[type="text"],.calculatorinput[type="number"]{
      width: 100%;
      margin-bottom:10px;
      padding: 5px;
    . calculator input [type="button"] \{\\
      width: 100%;
      padding:5px;
    }
  </style>
  <script>
    functioncalculateInterest() {
```

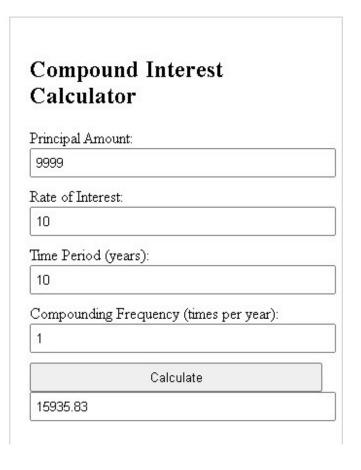
```
varprincipal=parseFloat(document.getElementById('principal').value);
      var rate = parseFloat(document.getElementById('rate').value);
      vartime=parseFloat(document.getElementById('time').value); var
      interest = (principal * rate * time) / 100;
      document.getElementById('result').value=interest;
   }
  </script>
</head>
<body>
  <divclass="calculator">
    <h2>SimpleInterestCalculator</h2>
    <formonsubmit="returnfalse;">
      PrincipalAmount:<inputtype="number"id="principal"placeholder="Enterprincipal
amount" required><br>
      RateofInterest:<inputtype="number"id="rate"placeholder="Enterrateofinterest"required
><br>
      TimePeriod(years):<inputtype="number"id="time"placeholder="Entertimeperiodin
years" required><br>
      <inputtype="button"value="Calculate"onclick="calculateInterest()">
      <inputtype="text"id="result"placeholder="SimpleInterest"readonly><br>
    </form>
  </div>
</body>
</html>
```



25. WAP INPHPTOCALCULATE COMPOUNDINTERESTWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
  <title>CompoundInterestCalculator</title>
  <style>
    .calculator {
      border:1pxsolid#ccc;
      padding: 20px;
      width: 300px;
      margin:0auto;
    .calculatorinput[type="text"],.calculatorinput[type="number"]{
      width: 100%;
      margin-bottom:10px;
      padding: 5px;
    .calculatorinput[type="button"]{
      width: 100%;
      padding:5px;
    }
  </style>
  <script>
```

```
functioncalculateCompoundInterest(){
                varprincipal=parseFloat(document.getElementById('principal').value);
                var rate = parseFloat(document.getElementById('rate').value) / 100;var
                time = parseFloat(document.getElementById('time').value);
                varfrequency= parseFloat(document.getElementById('frequency').value);
                varamount=principal*Math.pow((1+rate/frequency),(frequency*time)); var
                interest = amount - principal;
                document.getElementById('result').value=interest.toFixed(2);
          }
     </script>
</head>
<body>
     <divclass="calculator">
           <h2>CompoundInterestCalculator</h2>
           <formonsubmit="returnfalse;">
                 PrincipalAmount:<inputtype="number"id="principal"placeholder="Enterprincipal
amount" required><br>
                RateofInterest:<inputtype="number"id="rate"placeholder="Enterrateofinterest"required
><br>
                \label{timePeriod} Time Period (years): < input type = "number" id = "time" placeholder = "Entertime period in the property of the property 
years" required><br>
                 CompoundingFrequency(timesperyear):<inputtype="number"id="frequency"
placeholder="Enter compounding frequency" required><br>
                <inputtype="button"value="Calculate"onclick="calculateCompoundInterest()">
                 <inputtype="text"id="result"placeholder="CompoundInterest"readonly><br>
           </form>
      </div>
</body>
</html>
```



26. WAPIN PHPTOSHOWUSESOFFILEHANDLINGWITHGUI.

```
<!DOCTYPE html>
<html>
<head>
  <title>PHPFileHandlingExample</title>
  <style>
    .file-handler{
        border:1pxsolid#ccc;
        padding: 20px;
        width: 300px;
        margin:0auto;
    }
    .file-handlerinput[type="text"],.file-handlerinput[type="file"]{
        width: 100%;
        margin-bottom:10px;
        padding: 5px;
    }
    .file-handlerinput[type="button"]{
```

```
width: 100%;
      padding:5px;
    }
  </style>
  <script>
    functionreadFile(){
      varfileInput=document.getElementById('fileInput'); var
      file = fileInput.files[0];
      varreader=new FileReader();
      reader.onload = function(e) {
        document.getElementById('fileContent').value=e.target.result;
      };
      reader.readAsText(file);
    }
  </script>
</head>
<body>
  <divclass="file-handler">
    <h2>FileHandlingExample</h2>
    <formonsubmit="returnfalse;">
      SelectFile:<inputtype="file"id="fileInput"required><br>
      <inputtype="button"value="ReadFile"onclick="readFile()">
      <textareaid="fileContent"placeholder="Filecontentwillappearhere"readonly></textarea>
<br>
    </form>
  </div>
</body>
</html>
```



27.WAP IN PHP TO VALIDATE AN EMAIL ADDRESS ENTERED BY USER

27. WAP IN PHP TO VALIDATE AN EMAIL ADDRESS ENTERED BY USER

Valid email address.

28.WAP IN PHP THAT REPLACES ALL SPACES IN STRING WITH UNDERSCORE

28. WAP IN PHP THAT REPLACES ALL SPACES IN STRING WITH UNDERSCORE

Hello Peter!

29.WAP IN PHP TO CHECK IF A STRING IS A VALID URL OR NOT

29. WAP IN PHP TO CHECK IF A STRING IS A VALID URL OR NOT

https://www.w3schools.com is a valid URL

30.WAP IN PHP TO VALIDATE A PASSWORD MUST CONTAIN AT LEAST 8 CHARACTERS, ONE UPPERCASE LETTER, ONE LOWERCASE LETTER, ONE NUMBER AND ONE SPECIAL CHARACTER

30. WAP IN PHP TO VALIDATE A PASSWORD MUST CONTAIN AT LEAST 8 CHARACTERS, ONE UPPERCASE LETTER, ONE LOWERCASE LETTER, ONE NUMBER AND ONE SPECIAL CHARACTER

Valid Password

31.WAP IN PHP TO EXTRACT DOMAIN NAME FROM URL

```
// ② parse the url and print the host part
$array = parse_url($full_url);
print $array["host"];
```

31. WAP IN PHP TO EXTRACT DOMAIN NAME FROM URL

google.com

32.WAP IN PHP TO FIND AND REPLACE SPECIFIC WORD IN A STRING

WAP IN PHP TO FIND AND REPLACE SPECIFIC WORD IN A STRING

Array ($[0] \Rightarrow$ blue $[1] \Rightarrow$ pink $[2] \Rightarrow$ green $[3] \Rightarrow$ yellow) Replacements: 1

33.WAP IN PHP TO MATCH AND COUNT THE NUMBER OF VOWELS IN ASTRING

```
}
// Driver code
$str = "GeeksforGeeks";
$vowelsCount = countVowels($str);
echo "Number of vowels: " . $vowelsCount;
?>
```

WAP IN PHP TO MATCH AND COUNT THE NUMBER OF VOWELS IN ASTRING

Number of vowels: 5

PRACTICE QUESTIONS

```
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
   $allowedTypes = ['image/jpeg', 'image/png', 'image/gif'];
   $uploadDir = 'uploads/'; // Directory to store uploaded images
   // Check if the upload directory exists, if not, create it
   if (!is_dir($uploadDir)) {
       mkdir($uploadDir, 0777, true);
   // Get file info
   $fileTmpName = $_FILES['image']['tmp_name'];
   $fileName = $_FILES['image']['name'];
   $fileSize = $_FILES['image']['size'];
   $fileType = $_FILES['image']['type'];
   $fileError = $_FILES['image']['error'];
   if ($fileError !== UPLOAD_ERR_OK) {
       echo "Error during file upload.";
   if (!in_array($fileType, $allowedTypes)) {
       echo "Invalid file type. Only JPG, PNG, and GIF are allowed.";
   $fileExtension = pathinfo($fileName, PATHINFO_EXTENSION);
   $uniqueFileName = uniqid('img_', true) . '.' . $fileExtension;
   // Move uploaded file to the designated folder
   if (move_uploaded_file($fileTmpName, $uploadDir . $uniqueFileName)) {
```

Choose an image to upload: Choose File module table bottom.png Upload

```
??php
/* Write a PHP script to create a basic login system using sessions */

session_start(); // Start the session

// Check if the user is already logged in, if so redirect to home page
if (isset($_SESSION['username'])) {
    header("Location: home.php");
    exit;
}

// Define a simple hard-coded username and password for demonstration purposes
$validUsername = "user";
$validPassword = "password123";

// Check if the form is submitted
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
    $username = $_POST['username'];
    $password = $_POST['username'];

    // Check if the credentials are correct
    if ($username === $validUsername && $password === $validPassword) {
        // Set session variables
        $_SESSION['username'] = $username;
        // Redirect to home page
        header("Location: home.php");
        exit;
} else {
        // Invalid credentials
        $_error = "Invalid username or password.";
}
}
```

```
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Login</title>
   <h2>Login</h2>
   <?php
   if (isset($error)) {
       echo "$error";
   <form action="login.php" method="POST">
       <label for="username">Username:</label>
       <input type="text" name="username" id="username" required><br><br><<br>
      <label for="password">Password:</label>
       <input type="password" name="password" id="password" required><br><br>
      <button type="submit">Login</button>
   </form>
```

```
<?php
session_start(); // Start the session

// Destroy all session data
session_unset();
session_destroy();

// Redirect to login page after logout
header("Location: login.php");
exit;</pre>
```

Login

Username: user

Password:

Login

Welcome, user!

You are logged in.

Logout

```
<?php
/* Write a PHp script to create a form with fields for "First Name " and " Last Name " .
When the form is submitted , display a greeting message that includes the user's first and
last name */

// Check if the form is submitted via POST method
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
    // Get the first name and last name from the form
    $firstName = htmlspecialchars($_POST['first_name']);
    $lastName = htmlspecialchars($_POST['last_name']);

    // Display the greeting message with the user's first and last name
    echo "<h2>Hello, $firstName $lastName! Welcome to our site.</h2>";
} else {
    // If the form is not submitted yet, show the form
    ?>
    <!DOCTYPE html>
    <html lang="en">
    <head>
```



Please enter your details:

saks	hi		
pand	еу		
C	0	localhost/new/pn3.php	
	pand	pandey C ①	pandey

Hello, sakshi pandey! Welcome to our site.

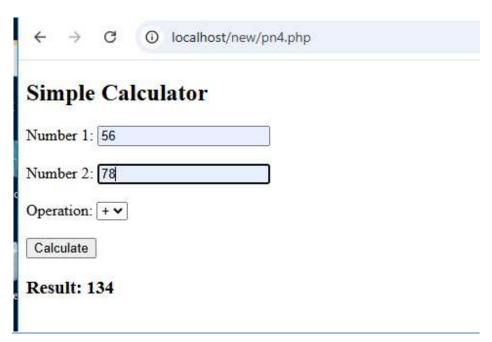
```
<?php

/* Write a PHp script to create a simple calculator form with two fields
for " Number1 " and "Number2 " and a drop-down to select an operation
(+, -, *, /) . when the form is submitted, display the result of the
selected operation */

// Initialize result variable
$result = null;

// Check if the form is submitted
</pre>
```

```
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
    $number1 = $_POST['number1'];
    $number2 = $_POST['number2'];
    $operation = $_POST['operation'];
    // Validate that inputs are numeric
    if (is_numeric($number1) && is_numeric($number2)) {
        // Perform the selected operation
        switch ($operation) {
                $result = $number1 + $number2;
                break;
                $result = $number1 - $number2;
                break;
                $result = $number1 * $number2;
                break;
                if ($number2 != 0) {
                    $result = $number1 / $number2;
                } else {
                    $result = "Error: Division by zero.";
                break;
            default:
                $result = "Invalid operation.";
                break;
        $result = "Please enter valid numbers.";
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Simple Calculator</title>
    <h2>Simple Calculator</h2>
    <form action="pn4.php" method="POST">
        <label for="number1">Number 1:</label>
        <input type="text" name="number1" id="number1" required><br><br>
        <label for="number2">Number 2:</label>
        <input type="text" name="number2" id="number2" required><br><br>
        <label for="operation">Operation:</label>
        <select name="operation" id="operation" required>
            <option value="+">+</option>
            <option value="-">-</option>
            <option value="*">*</option>
            <option value="/">/</option>
        </select><br><br>
```



```
<?php
/* Write a PHp script to create a user registration form with fields for
" Username ", "Password ", " Confirm Password ".
When the form is submitted , check that the password and confirm password match.
If they match , display a success message, otherwise display an error */

// Initialize the result message
$message = "";

// Check if the form is submitted
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
    // Get the form values
    $_username = $_POST['username'];
    $password = $_POST['password'];

    $confirmPassword = $_POST['confirm_password'];

    // Check if password and confirm password match
    if ($password === $confirmPassword) {
        // Passwords match, display success message
        $message = "Registration successful! Welcome, $username.";
    } else {
        // Passwords don't match, display error message
</pre>
```

```
$message = "Error: Password and Confirm Password do not match.";
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>User Registration</title>
   <h2>User Registration</h2>
   if ($message !== "") {
       echo "<p style='color: " . (strpos($message, "Error") === false ? "green" : "red") .
";'>$message";
   <!-- Registration Form -->
   <form action="pn5.php" method="POST">
       <label for="username">Username:</label>
       <input type="text" name="username" id="username" required><br><br><<br>
       <label for="password">Password:</label>
       <input type="password" name="password" id="password" required><br><br>
       <label for="confirm_password">Confirm Password:</label>
       <input type="password" name="confirm_password" id="confirm_password" required><br><br><br>
       <button type="submit">Register</button>
```

User Registration

Username:	
Password:	
Confirm Password:	

```
and display an error message */
// Initialize result variable and error message
$result = null;
$errorMessage = "";
if ($_SERVER['REQUEST_METHOD'] == 'POST') {
    $number1 = $_POST['number1'];
    $number2 = $_POST['number2'];
    if (is_numeric($number1) && is_numeric($number2)) {
            if (\text{$number2 == 0}) {
                throw new Exception("Error: Division by zero is not allowed.");
            } else {
                $result = $number1 / $number2;
        } catch (Exception $e) {
            $errorMessage = $e->getMessage();
    } else {
        $errorMessage = "Please enter valid numbers.";
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Simple Calculator with Exception Handling</title>
    <h2>Simple Division Calculator</h2>
    if ($errorMessage !== "") {
        echo "$errorMessage";
    } elseif ($result !== null) {
        echo "<h3>Result: $result</h3>";
    <form action="pn6.php" method="POST">
        <label for="number1">Number 1:</label>
        <input type="text" name="number1" id="number1" required><br><br>
```

← → C ① localhost/new/pn6.php	+	\rightarrow	C	0	localhost/new/pn6.php	
-------------------------------	---	---------------	---	---	-----------------------	--

Simple Division Calculator

Error: Division by zero is not allowed.

Number 1: 56

Number 2: 0

Divide

```
/* Write a PHp script that accepts an age input from user and throws a
custom exception if the age is less than 18. Catch the exception
and dsiplay an error message saying " Age must be 18 or older " */

// Define a custom exception class
class AgeException extends Exception {
    // Custom message for the exception
    public function errorMessage() {
        return "Error: Age must be 18 or older.";
    }
}

// Initialize variables
$age = null;
$errorMessage = "";

// Check if the form is submitted
if ($_SERVER("REQUEST_METHOD'] == 'POST') {
    // Get the age from the form
    $age = $_POST['age'];

    try {
        // Check if the age is numeric
        if (!is_numeric($age)) {
             throw new Exception("Error: Please enter a valid number for age.");
        }

        // Throw an exception if age is less than 18
```

```
if ($age < 18) {
           throw new AgeException(); // Custom exception is thrown
           $errorMessage = "You are eligible, age is: $age.";
   } catch (AgeException $e) {
       // Catch the custom exception
       $errorMessage = $e->errorMessage();
   } catch (Exception $e) {
       $errorMessage = $e->getMessage();
<!DOCTYPE html>
<html lang="en">
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>Age Check</title>
   <h2>Enter Your Age</h2>
   if ($errorMessage !== "") {
       echo "$errorMessage";
   <form action="pn7.php" method="POST">
       <label for="age">Age:</label>
       <input type="text" name="age" id="age" required><br><br>
       <button type="submit">Submit</button>
</body>
```

← → C ① localhost/new/pn7.php

Enter Your Age

Error: Age must be 18 or older.

Age: 12

Submit

```
display a message indicating whether the conection was sucess ful. */
$servername ="localhost";
$username = "root";
$password = "";
$dbname ="company";
$conn = new mysqli($servername,$username,$password,$dbname);
if($conn->connect_error){
   die("Connection failed: ".$conn->connect_error);
echo "connected successfully!";
$sql = "INSERT INTO employees (id, name_emp, email, salary) VALUES
('102', 'user4', 'user4@example.com',40000)";
if($conn->query($sql) == TRUE){
   echo "New record created successfully";
else{
   echo "Error: ".$sql."<br>>".$conn->error;
/* write php script to delete an employee data with id E102 */
$sql2 = "DELETE FROM employees WHERE id ='102' ";
if($conn->query($sql2) == TRUE){
   echo "Record deleted successfully";
else{
   echo "Error: ".$sql."<br>>".$conn->error;
$sql3 = " SELECT * FROM employees ORDER BY id";
$result = $conn->query($sq13);
$conn->close();
<!DOCTYPE html>
<html lang="en">
    <meta charset="UTF-8">
```

```
<title>Employee details</title>
   table {
       margin: 0 auto;
       font-size: large;
       border: 1px solid black;
       text-align: center;
       color: #006600;
       font-size: xx-large;
       font-family: 'Gill Sans', 'Gill Sans MT',
' Calibri', 'Trebuchet MS', 'sans-serif';
   td {
       background-color: #E4F5D4;
       border: 1px solid black;
   th,
   td {
       font-weight: bold;
       border: 1px solid black;
       padding: 10px;
       text-align: center;
   td {
       font-weight: lighter;
   <h1>Company</h1>
           Employee Id 
           Employee Name
           Employee Email
           GFG Articles
       <!-- PHP CODE TO FETCH DATA FROM ROWS -->
           while($rows=$result->fetch_assoc())
              ROW OF EVERY COLUMN -->
           <?php echo $rows['id'];?>
           <?php echo $rows['name_emp'];?>
           <?php echo $rows['email'];?>
```



connected successfully!

Company

Employee Id	Employee Name	Employee Email	GFG Articles
101	Andrew	andrew@example.com	60000
103	user3	user3@example.com	40000

connected successfully!New record created successfully

Company

Employee Id	Employee Name	Employee Email	GFG Articles
101	Andrew	andrew@example.com	60000
102	user4	user4@example.com	40000
103	user3	user3@example.com	40000

connected successfully!Record deleted successfully

Company

Employee Id	Employee Name	Employee Email	GFG Articles
101	Andrew	andrew@example.com	60000
103	user3	user3@example.com	40000

Company

Employee Id	Employee Name	Employee Email	GFG Articles
101	Andrew	andrew@example.com	60000
103	user3	user3@example.com	40000