```php
<!-- Practical-9: Write a PHP script to verify new user via email and mobile number.

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<?php
session_start();
function signup($data)
{
  $errors = array();
  //validate
  if(!preg_match('/^[a-zA-Z]+$/', $data['username'])){
    $errors[] = "Please enter a valid username";
  }
  if(!filter_var($data['email'],FILTER_VALIDATE_EMAIL)){
    $errors[] = "Please enter a valid email";
  }
  if(strlen(trim($data['password'])) < 4){
    $errors[] = "Password must be atleast 4 chars long";
  }
  if($data['password'] != $data['password2']){
    $errors[] = "Passwords must match";
  }
  $check = database_run("select * from users where email = :email limit 1",['email'=>$data['email']]);
  if(is_array($check)){
    $errors[] = "That email already exists";
  }
  //save
  if(count($errors) == 0){

    $arr['username'] = $data['username'];
    $arr['email'] = $data['email'];
    $arr['password'] = hash('sha256',$data['password']);
    $arr['date'] = date("Y-m-d H:i:s");

    $query = "insert into users (username,email,password,date) values
    (:username,:email,:password,:date)";

    database_run($query,$arr);
  }
  return $errors;
}
function login($data)
{
  $errors = array();
  //validate
  if(!filter_var($data['email'],FILTER_VALIDATE_EMAIL)){
    $errors[] = "Please enter a valid email";
  }
  if(strlen(trim($data['password'])) < 4){
    $errors[] = "Password must be atleast 4 chars long";
  }
  //check
  if(count($errors) == 0){

    $arr['email'] = $data['email'];
    $password = hash('sha256', $data['password']);
```

```php
      $query = "select * from users where email = :email limit 1";

      $row = database_run($query,$arr);

      if(is_array($row)){
        $row = $row[0];

        if($password === $row->password){

          $_SESSION['USER'] = $row;
          $_SESSION['LOGGED_IN'] = true;
        }else{
          $errors[] = "wrong email or password";
        }

      }else{
        $errors[] = "wrong email or password";
      }
    }
    return $errors;
}
function database_run($query,$vars = array())
{
  $string = "mysql:host=localhost;dbname=verify_db";
  $con = new PDO($string,'root','');

  if(!$con){
    return false;
  }

  $stm = $con->prepare($query);
  $check = $stm->execute($vars);

  if($check){

    $data = $stm->fetchAll(PDO::FETCH_OBJ);

    if(count($data) > 0){
      return $data;
    }
  }

  return false;
}
function check_login($redirect = true){

  if(isset($_SESSION['USER']) && isset($_SESSION['LOGGED_IN'])){

    return true;
  }

  if($redirect){
    header("Location: login.php");
    die;
  }else{
    return false;
  }
```

```php
118 }
119 function check_verified(){
120
121   $id = $_SESSION['USER']->id;
122   $query = "select * from users where id = '$id' limit 1";
123   $row = database_run($query);
124
125   if(is_array($row)){
126     $row = $row[0];
127
128     if($row->email == $row->email_verified){
129
130       return true;
131     }
132   }
133
134   return false;
135
136 }
137
138 //practical9_2.php
139 <div>
140   <a href="index.php">Home</a> . <a href="login.php">Login</a> . <a href="signup.php">Signup</a>
141     . <a href="profile.php">Profile</a> . <a href="logout.php">Logout</a> .
142 </div>
143
144 //practical9_3.php
145 <!DOCTYPE html>
146 <html>
147 <head>
148   <meta charset="utf-8">
149   <title>Home</title>
150 </head>
151 <body>
152   <h1>Home page</h1>
153   <?php include('header.php')?>
154 </body>
155 </html>
156
157 //practical9_4.php
158 <?php
159 require "functions.php";
160 $errors = array();
161 if($_SERVER['REQUEST_METHOD'] == "POST")
162 {
163   $errors = login($_POST);
164   if(count($errors) == 0)
165   {
166     header("Location: profile.php");
167     die;
168   }
169 }
170 ?>
171 <!DOCTYPE html>
172 <html>
173 <head>
174   <meta charset="utf-8">
175   <title>Login</title>
```

```
176  </head>
177  <body>
178   <h1>Login</h1>
179   <?php include('header.php')?>
180   <div>
181    <div>
182     <?php if(count($errors) > 0):?>
183      <?php foreach ($errors as $error):?>
184        <?= $error?> <br>
185      <?php endforeach;?>
186     <?php endif;?>
187    </div>
188    <form method="post">
189     <input type="email" name="email" placeholder="Email"><br>
190     <input type="password" name="password" placeholder="Password"><br>
191     <br>
192     <input type="submit" value="Login">
193    </form>
194   </div>
195  </body>
196  </html>
197
198  //practical9_5.php
199  <?php
200  session_start();
201  if(isset($_SESSION['USER'])){
202    unset($_SESSION['USER']);
203  }
204  if(isset($_SESSION['LOGGED_IN'])){
205    unset($_SESSION['LOGGED_IN']);
206  }
207  header("Location: login.php");
208  die;
209
210  //practical9_6.php
211  <?php
212    use PHPMailer\PHPMailer\PHPMailer;
213    use PHPMailer\PHPMailer\Exception;
214    require 'PHPMailer-master/src/Exception.php';
215    require 'PHPMailer-master/src/PHPMailer.php';
216    require 'PHPMailer-master/src/SMTP.php';
217  function send_mail($recipient,$subject,$message)
218  {
219    $mail = new PHPMailer();
220    $mail->IsSMTP();
221    $mail->SMTPDebug  = 0;
222    $mail->SMTPAuth   = TRUE;
223    $mail->SMTPSecure = "tls";
224    $mail->Port       = 587;
225    $mail->Host       = "smtp.gmail.com";
226    $mail->Username   = "phptest041@gmail.com";
227    $mail->Password   = "bpcz uyjn zvuq fwzy";
228    $mail->IsHTML(true);
229    $mail->AddAddress($recipient, "esteemed customer");
230    $mail->SetFrom("phptest041@gmail.com", "My website");
231    $mail->Subject = $subject;
232    $content = $message;
233    $mail->MsgHTML($content);
234    if(!$mail->Send()) {
```

```php
      //echo "Error while sending Email.";
      //echo "<pre>";
      //var_dump($mail);
      return false;
   } else {
      //echo "Email sent successfully";
      return true;
   }
}
?>


//practical9_7.php
<?php
  require "functions.php";
  check_login();
?>
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title>Profile</title>
</head>
<body>
  <h1>Profile</h1>
  <?php include('header.php');?>
  <?php if(check_login(false)):?>
    Hi, <?=$_SESSION['USER']->username?>;
    <br><br>
    <?php if(!check_verified()):?>
      <a href="verify.php">
        <button>Verify Profile</button>
      </a>
    <?php endif;?>
  <?php endif;?>
</body>
</html>

//practical9_8.php
<?php
require "functions.php";
$errors = array();
if($_SERVER['REQUEST_METHOD'] == "POST")
{
  $errors = signup($_POST);
  if(count($errors) == 0)
  {
    header("Location: login.php");
    die;
  }
}
?>
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title>Signup</title>
</head>
<body>
```

```
293    <h1>Signup</h1>
294    <?php include('header.php')?>
295    <div>
296      <div>
297        <?php if(count($errors) > 0):?>
298          <?php foreach ($errors as $error):?>
299            <?= $error?> <br>
300          <?php endforeach;?>
301        <?php endif;?>
302      </div>
303      <form method="post">
304        <input type="text" name="username" placeholder="Username"><br>
305        <input type="text" name="email" placeholder="Email"><br>
306        <input type="text" name="password" placeholder="Password"><br>
307        <input type="text" name="password2" placeholder="Retype Password"><br>
308        <br>
309        <input type="submit" value="Signup">
310      </form>
311    </div>
312  </body>
313  </html>
314
315  //practical9_9.php
316  <?php
317    require "mail.php";
318    require "functions.php";
319    check_login();
320    $errors = array();
321    if($_SERVER['REQUEST_METHOD'] == "GET" && !check_verified()){
322      $vars['code'] =  rand(10000,99999);
323      $vars['expires'] = (time() + (60 * 10));
324      $vars['email'] = $_SESSION['USER']->email;
325      $query = "insert into verify (code,expires,email) values (:code,:expires,:email)";
326      database_run($query,$vars);
327      $message = "your code is " . $vars['code'];
328      $subject = "Email verification";
329      $recipient = $vars['email'];
330      send_mail($recipient,$subject,$message);
331    }
332    if($_SERVER['REQUEST_METHOD'] == "POST"){
333      if(!check_verified()){
334        $query = "select * from verify where code = :code && email = :email";
335        $vars = array();
336        $vars['email'] = $_SESSION['USER']->email;
337        $vars['code'] = $_POST['code'];
338        $row = database_run($query,$vars);
339        if(is_array($row)){
340          $row = $row[0];
341          $time = time();
342          if($row->expires > $time){
343            $id = $_SESSION['USER']->id;
344            $query = "update users set email_verified = email where id = '$id' limit 1";
345            database_run($query);
346            header("Location: profile.php");
347            die;
348          }else{
349            echo "Code expired";
350          }
351        }else{
```

```php
            echo "wrong code";
        }
    }else{
      echo "You're already verified";
    }
  }
?>
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title>Verify</title>
</head>
<body>
  <h1>Verify</h1>
  <?php include('header.php');?>
  <br><br>
  <div>
      <br>an email was sent to your address. paste the code from the email here<br>
    <div>
      <?php if(count($errors) > 0):?>
        <?php foreach ($errors as $error):?>
          <?= $error?> <br>
        <?php endforeach;?>
      <?php endif;?>
    </div><br>
    <form method="post">
      <input type="text" name="code" placeholder="Enter your Code"><br>
      <br>
      <input type="submit" value="Verify">
    </form>
  </div>
</body>
</html>
```