

```
1: <?
2:     /**
3:      * home.php
4:      *
5:      * A simple home page for these login demos.
6:      *
7:      * David J. Malan
8:      * Computer Science E-75
9:      * Harvard Extension School
10:     */
11:
12:     // enable sessions
13:     session_start();
14: ?>
15:
16: <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional
.dtd">
17:
18: <html xmlns="http://www.w3.org/1999/xhtml">
19:     <head>
20:         <title>Home</title>
21:     </head>
22:     <body>
23:         <h1>Home</h1>
24:         <h3>
25:             <? if ($_SESSION["authenticated"]) { ?>
26:                 You are logged in!
27:                 <br />
28:                 <a href="logout.php">log out</a>
29:             <? } else { ?>
30:                 You are not logged in!
31:             <? } ?>
32:         </h3>
33:         <br />
34:         <b>Login Demos</b>
35:         <ul>
36:             <li><a href="login5.php">version 5</a></li>
37:             <li><a href="login6.php">version 6</a></li>
38:             <li><a href="login7.php">version 7</a></li>
39:             <li><a href="login8.php">version 8</a></li>
40:         </ul>
41:     </body>
42: </html>
```

```
1: <?
2:
3:     // do some stuff
4:
```

```
1: <?
2:     /**
3:      * login5.php
4:      *
5:      * A simple login module that checks a username and password
6:      * against a MySQL table with no encryption.
7:      *
8:      * David J. Malan
9:      * Computer Science E-75
10:     * Harvard Extension School
11:     */
12:
13:     // enable sessions
14:     session_start();
15:
16:     // connect to database
17:     if (($connection = mysql_connect("", "", "")) === FALSE)
18:         die("Could not connect to database");
19:
20:     // select database
21:     if (mysql_select_db("", $connection) === FALSE)
22:         die("Could not select database");
23:
24:     // if username and password were submitted, check them
25:     if (isset($_POST["user"]) && isset($_POST["pass"]))
26:     {
27:         // prepare SQL
28:         $sql = sprintf("SELECT * FROM users WHERE user='%s'",
29:             mysql_real_escape_string($_POST["user"]));
30:
31:         // execute query
32:         $result = mysql_query($sql);
33:         if ($result === FALSE)
34:             die("Could not query database");
35:
36:         // check whether we found a row
37:         if (mysql_num_rows($result) == 1)
38:         {
39:             // fetch row
40:             $row = mysql_fetch_assoc($result);
41:
42:             // check password
43:             if ($row["pass"] == $_POST["pass"])
44:             {
45:                 // remember that user's logged in
46:                 $_SESSION["authenticated"] = TRUE;
47:
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```
48:         // redirect user to home page, using absolute path, per
49:         // http://us2.php.net/manual/en/function.header.php
50:         $host = $_SERVER["HTTP_HOST"];
51:         $path = rtrim(dirname($_SERVER["PHP_SELF"]), "\\");
52:         header("Location: http://$host$path/home.php");
53:         exit;
54:     }
55: }
56: }
57: ?>
58:
59: <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional
.dtd">
60:
61: <html xmlns="http://www.w3.org/1999/xhtml">
62: <head>
63: <title>Log In</title>
64: </head>
65: <body>
66: <form action="<? echo $_SERVER["PHP_SELF"]; ?>" method="post">
67: <table>
68: <tr>
69: <td>Username:</td>
70: <td>
71: <input name="user" type="text" /></td>
72: </tr>
73: <tr>
74: <td>Password:</td>
75: <td><input name="pass" type="password" /></td>
76: </tr>
77: <tr>
78: <td></td>
79: <td><input type="submit" value="Log In" /></td>
80: </tr>
81: </table>
82: </form>
83: </body>
84: </html>
```

```
1: <?
2:  /**
3:   * login6.php
4:   *
5:   * A simple login module that checks a username and password
6:   * against a MySQL table with no encryption by asking for a binary answer.
7:   *
8:   * David J. Malan
9:   * Computer Science E-75
10:  * Harvard Extension School
11:  */
12:
13:  // enable sessions
14:  session_start();
15:
16:  // connect to database
17:  if (($connection = mysql_connect("", "", "")) === FALSE)
18:      die("Could not connect to database");
19:
20:  // select database
21:  if (mysql_select_db("", $connection) === FALSE)
22:      die("Could not select database");
23:
24:  // if username and password were submitted, check them
25:  if (isset($_POST["user"]) && isset($_POST["pass"]))
26:  {
27:      // prepare SQL
28:      $sql = sprintf("SELECT 1 FROM users WHERE user='%s' AND pass='%s'",
29:                    mysql_real_escape_string($_POST["user"]),
30:                    mysql_real_escape_string($_POST["pass"]));
31:
32:      // execute query
33:      $result = mysql_query($sql);
34:      if ($result === FALSE)
35:          die("Could not query database");
36:
37:      // check whether we found a row
38:      if (mysql_num_rows($result) == 1)
39:      {
40:          // remember that user's logged in
41:          $_SESSION["authenticated"] = TRUE;
42:
43:          // redirect user to home page, using absolute path, per
44:          // http://us2.php.net/manual/en/function.header.php
45:          $host = $_SERVER["HTTP_HOST"];
46:          $path = rtrim(dirname($_SERVER["PHP_SELF"]), "\\");
47:          header("Location: http://$host$path/home.php");
```

```
48:         exit;
49:     }
50: }
51: ?>
52:
53: <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional
.dtd">
54:
55: <html xmlns="http://www.w3.org/1999/xhtml">
56: <head>
57: <title>Log In</title>
58: </head>
59: <body>
60: <form action="<? echo $_SERVER["PHP_SELF"]; ?>" method="post">
61: <table>
62: <tr>
63: <td>Username:</td>
64: <td>
65: <input name="user" type="text" /></td>
66: </tr>
67: <tr>
68: <td>Password:</td>
69: <td><input name="pass" type="password" /></td>
70: </tr>
71: <tr>
72: <td></td>
73: <td><input type="submit" value="Log In" /></td>
74: </tr>
75: </table>
76: </form>
77: </body>
78: </html>
```

```
1: <?
2:  /**
3:   * login7.php
4:   *
5:   * A simple login module that checks a username and password
6:   * against a MySQL table with weak encryption (well, a weak hash).
7:   *
8:   * David J. Malan
9:   * Computer Science E-75
10:  * Harvard Extension School
11:  */
12:
13:  // enable sessions
14:  session_start();
15:
16:  // connect to database
17:  if (($connection = mysql_connect("", "", "")) === FALSE)
18:      die("Could not connect to database");
19:
20:  // select database
21:  if (mysql_select_db("", $connection) === FALSE)
22:      die("Could not select database");
23:
24:  // if username and password were submitted, check them
25:  if (isset($_POST["user"]) && isset($_POST["pass"]))
26:  {
27:      // prepare SQL
28:      $sql = sprintf("SELECT 1 FROM users WHERE user='%s' AND pass=PASSWORD('%s')",
29:                    mysql_real_escape_string($_POST["user"]),
30:                    mysql_real_escape_string($_POST["pass"]));
31:
32:      // execute query
33:      $result = mysql_query($sql);
34:      if ($result === FALSE)
35:          die("Could not query database");
36:
37:      // check whether we found a row
38:      if (mysql_num_rows($result) == 1)
39:      {
40:          // remember that user's logged in
41:          $_SESSION["authenticated"] = TRUE;
42:
43:          // redirect user to home page, using absolute path, per
44:          // http://us2.php.net/manual/en/function.header.php
45:          $host = $_SERVER["HTTP_HOST"];
46:          $path = rtrim(dirname($_SERVER["PHP_SELF"]), "\\");
47:          header("Location: http://$host$path/home.php");
```

```
48:         exit;
49:     }
50: }
51: ?>
52:
53: <!DOCTYPE html PUBLIC "-//W3C/DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional
.dtd">
54:
55: <html xmlns="http://www.w3.org/1999/xhtml">
56:   <head>
57:     <title>Log In</title>
58:   </head>
59:   <body>
60:     <form action="<? echo $_SERVER["PHP_SELF"]; ?>" method="post">
61:       <table>
62:         <tr>
63:           <td>Username:</td>
64:           <td>
65:             <input name="user" type="text" /></td>
66:         </tr>
67:         <tr>
68:           <td>Password:</td>
69:           <td><input name="pass" type="password" /></td>
70:         </tr>
71:         <tr>
72:           <td></td>
73:           <td><input type="submit" value="Log In" /></td>
74:         </tr>
75:       </table>
76:     </form>
77:   </body>
78: </html>
```

```
1: <?
2:  /**
3:   * login8.php
4:   *
5:   * A simple login module that checks a username and password
6:   * against a MySQL table with strong encryption (but insecure secret).
7:   *
8:   * David J. Malan
9:   * Computer Science E-75
10:  * Harvard Extension School
11:  */
12:
13:  // enable sessions
14:  session_start();
15:
16:  // connect to database
17:  if (($connection = mysql_connect("", "", "")) === FALSE)
18:      die("Could not connect to database");
19:
20:  // select database
21:  if (mysql_select_db("", $connection) === FALSE)
22:      die("Could not select database");
23:
24:  // if username and password were submitted, check them
25:  if (isset($_POST["user"]) && isset($_POST["pass"]))
26:  {
27:      // prepare SQL
28:      $sql = sprintf("SELECT 1 FROM users WHERE user='%s' AND pass=AES_ENCRYPT('%s', 'secret')",
29:                    mysql_real_escape_string($_POST["user"]),
30:                    mysql_real_escape_string($_POST["pass"]));
31:
32:      // execute query
33:      $result = mysql_query($sql);
34:      if ($result === FALSE)
35:          die("Could not query database");
36:
37:      // check whether we found a row
38:      if (mysql_num_rows($result) == 1)
39:      {
40:          // remember that user's logged in
41:          $_SESSION["authenticated"] = TRUE;
42:
43:          // redirect user to home page, using absolute path, per
44:          // http://us2.php.net/manual/en/function.header.php
45:          $host = $_SERVER["HTTP_HOST"];
46:          $path = rtrim(dirname($_SERVER["PHP_SELF"]), "\\");
47:          header("Location: http://$host$path/home.php");
```

```
48:         exit;
49:     }
50: }
51: ?>
52:
53: <!DOCTYPE html PUBLIC "-//W3C/DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional
.dtd">
54:
55: <html xmlns="http://www.w3.org/1999/xhtml">
56:   <head>
57:     <title>Log In</title>
58:   </head>
59:   <body>
60:     <form action="<? echo $_SERVER["PHP_SELF"]; ?>" method="post">
61:       <table>
62:         <tr>
63:           <td>Username:</td>
64:           <td>
65:             <input name="user" type="text" /></td>
66:         </tr>
67:         <tr>
68:           <td>Password:</td>
69:           <td><input name="pass" type="password" /></td>
70:         </tr>
71:         <tr>
72:           <td></td>
73:           <td><input type="submit" value="Log In" /></td>
74:         </tr>
75:       </table>
76:     </form>
77:   </body>
78: </html>
```

```
1: <?
2:     /**
3:      * logout.php
4:      *
5:      * A simple logout module for all of our login modules.
6:      *
7:      * David J. Malan
8:      * Computer Science E-75
9:      * Harvard Extension School
10:     */
11:
12:     // enable sessions
13:     session_start();
14:
15:     // delete cookies, if any
16:     setcookie("user", "", time() - 3600);
17:     setcookie("pass", "", time() - 3600);
18:
19:     // log user out
20:     setcookie(session_name(), "", time() - 3600);
21:     session_destroy();
22: ?>
23:
24: <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional
.dtd">
25:
26: <html xmlns="http://www.w3.org/1999/xhtml">
27:   <head>
28:     <title>Log Out</title>
29:   </head>
30:   <body>
31:     <h1>You are logged out!</h1>
32:     <h3><a href="home.php">home</a></h3>
33:   </body>
34: </html>
```