

## ❖ md5 ( )

- The md5() function calculates the MD5 hash of a string.
- The md5() function uses the RSA Data Security, Inc. MD5 Message-Digest Algorithm.
- From RFC 1321 - The MD5 Message-Digest Algorithm: "The MD5 message-digest algorithm takes as input a message of arbitrary length and produces as output a 128-bit "fingerprint" or "message digest" of the input. The MD5 algorithm is intended for digital signature applications, where a large file must be "compressed" in a secure manner before being encrypted with a private (secret) key under a public-key cryptosystem such as RSA."
- To calculate the MD5 hash of a file, use the md5\_file() function.
- It takes two parameters. First is string (required) and second is binary which is by default false.
- It returns the hash as a 32-character hexadecimal number
- Example :

```
?php

if(isset($_POST['password'])) {
    $password = md5($_POST['password']);
    if(!empty($password)) {
        $filename = 'hash.txt';
        $handle = fopen($filename , 'r');
        $file_password = fread($handle , filesize($filename));

        if($password == $file_password) {
            echo 'passwords are same';
        }
        else {
            echo 'passwords are not same. please enter password again';
        }
    }
    else {
        echo 'please enter password';
    }
}

?>

<!DOCTYPE html>
<html lang="en">
<head>
    <title>PHP</title>
</head>
```

```
<body>
  <hr>
  <form action="" method="post">
    <input type="password" name="password" id="password"> <br><br>
    <input type="submit" value="Submit">
  </form>
</body>
</html>
```

### ❖ mail( ) in PHP

- first of all to send mail we have to change some settings in php.ini file and in sendmail.ini file
- in php.ini file we have to do 4 changes which are as follows :
  - 1. SMTP = smtp.gmail.com
  - 2. smtp\_port=587
  - 3. sendmail\_from = [YourGmailId@gmail.com](mailto:YourGmailId@gmail.com)
  - 4. sendmail\_path = "\"C:\xampp\sendmail\sendmail.exe\" -t"
- After modifying the php.ini file now we have to modify sendmail.ini file
- We have to perform following changes in sendmail.ini file :
  - 1. smtp\_server=smtp.gmail.com
  - 2. smtp\_port=587
  - 3. error\_logfile=error.log
  - 4. debug\_logfile=debug.log
  - 5. auth\_username=YourGmailId@gmail.com
  - 6. auth\_password=Your-Gmail-Password
  - 7. force\_sender=YourGmailId@gmail.com(optional)
- After modifying these two files now we are ready to send mails in php
- mail( ) is used to send mails in php
- mail( ) takes 5 parameters out of which 3 are required and 2 are options.
- The parameters that mail( ) takes are as follows :
  - 1. To (required)
    - It is the email address of receiver or receivers
    - Ex. [user@example.com](mailto:user@example.com)

- 2. Subject (required)
  - It is the subject of the email
- 3. Message (required)
  - It is the message to be sent.
  - Each line should be separated with a CRLF (\r\n)
  - Lines should not be larger than 70 characters.
- 4. Additional headers (optional)
  - String or array to be inserted at the end of the email header.
  - This is typically used to add extra headers (From, Cc, and Bcc)
- 5. Additional params (optional)
  - The additional\_params parameter can be used to pass additional flags as command line options to the program configured to be used when sending mail, as defined by the sendmail\_path configuration setting
- Example :

```
<?php

ini_set("SMTP", "ssl://smtp.gmail.com");
ini_set("smtp_port", "587");
ini_set('sendmail_from', 'fashion45srk@gmail.com');

$to = 'fashion45srk@gmail.com';
$subject = 'test email';
$body = 'hello , good afternoon. this is my our test mail that has been
sent to you. thank you.';
$headers = 'From: training session <someone@gmail.com>';

if (mail($to, $subject, $body, $headers)) {
    echo 'Mail has been sent to <strong>'. $to .'</strong>';
} else {
    echo 'There was an error while sending an email.';
}

?>
```

## ❖ Read xml files in php

- We can read xml files in php using simpleXML parser.
- SimpleXML is a tree-based parser.
- SimpleXML provides an easy way of getting an element's name, attributes and textual content if you know the XML document's structure or layout.

- SimpleXML turns an XML document into a data structure you can iterate through like a collection of arrays and objects.
- Compared to DOM or the Expat parser, SimpleXML takes a fewer lines of code to read text data from an element.
- The PHP **simplexml\_load\_string()** function is used to read XML data from a string.
- Example :

#### CEOs.xml file

```
<companies>
  <company>
    <name>Google</name>
    <ceo>sundar pichai</ceo>
    <details>
      <birthdate>10 june 1972</birthdate>
      <age>48</age>
    </details>
  </company>
  <company>
    <name>Apple</name>
    <ceo>Tim Cook</ceo>
    <details>
      <birthdate>1 november 1960</birthdate>
      <age>60</age>
    </details>
  </company>
  <company>
    <name>Microsoft</name>
    <ceo>Satya Nadella</ceo>
    <details>
      <birthdate>19 august 1967</birthdate>
      <age>53</age>
    </details>
  </company>
  <company>
    <name>spaceX</name>
    <ceo>Alon Musk</ceo>
    <details>
      <birthdate>28 june 1971</birthdate>
      <age>49</age>
    </details>
  </company>
</companies>
```

## php\_load\_xml.php file

```
<?php

$xml = simplexml_load_file('CEOs.xml');

foreach($xml -> company as $company) {
    echo $company->name.'\'s CEO is <strong>'.$company->ceo . '</strong><br><br>';
    foreach($company -> details as $detail) {
        echo 'birth date is : '.$detail->birthdate . '<br> age is : '. $detail->age . '<br><br>';
    }
}

?>
```



php