FYBSc. IT Sem II Subject: Web Programming April 2O18

1. Attempt any three of the following:

a. What is E-commerce? Explain the advantages, disadvantages and types of ecommerce.

Ans: E-commerce: E-commerce (electronic commerce or EC) is the buying and selling of goods and services, or the transmitting of funds or data, over an electronic network, primarily the internet. These business transactions occur either as business-to-business, business-to-consumer, consumer-to-consumer or consumer-to-business. The terms e-commerce and e-business are often used interchangeably. The term e-tail is also sometimes used in reference to transactional processes for online shopping.

Advantages of Ecommerce

1. Faster buying/selling procedure, as well as easy to find products.
2. Buying/selling 24/7.
3. More reach to customers, there is no theoretical geographic limitations.
4. Low operational costs and better quality of services.
5. No need of physical company set-ups.
6. Easy to start and manage a business.
7. Customers can easily select products from different providers without moving around physically.

Disadvantages of Ecommerce

- Any one, good or bad, can easily start a business. And there are many bad sites which eat up customers' money.
- There is no guarantee of product quality.
- Mechanical failures can cause unpredictable effects on the total processes.
- As there is minimum chance of direct customer to company interactions, customer loyalty is always on a check.
- There are many hackers who look for opportunities, and thus an ecommerce site, service, payment gateways, all are always prone to attack.

There are 4 types of e-commerce:

Business-to-Business (B2B): This kind of eCommerce consists of all the electronic transactions and dealings related to the goods and services.

Business-to-Consumer (B2C): The Business-to-Consumer eCommerce is related to the transactions and relationship between businesses and the end customers. This is mainly to do with the retail eCommerce trade that takes place online.

Consumer-to-Consumer (C2C): This consists of electronic transactions of products and services between two customers. These are mainly conducted through a third party that provides an online platform for these transactions. Sites, where old items are bought and sold, are examples of C2C eCommerce.

Consumer-to-Business (C2B): In this, a complete reversal of the selling and buying process takes place. This is very relevant for crowdsourcing projects. In this case, individuals make their items or services and sell them to companies. Some examples are proposals for company site or logo, royalty free photographs, design elements and so on.

b. Differentiate between Internet and WWW.

Ans:

The Internet, sometimes called simply "the Net," is a worldwide system of computer networks - a network of networks in which users at any one computer can, if they have permission, get information from any other computer (and sometimes talk directly to users at other computers). It was conceived by the Advanced Research Projects Agency (ARPA) of the U.S. government in 1969 and was first known as the ARPANet.

The World Wide Web (WWW) is a network of online content that is formatted in HTML and accessed via HTTP. The term refers to all the interlinked HTML pages that can be accessed over the Internet. The World Wide Web was originally designed in 1991 by Tim Berners-Lee while he was a contractor at CERN. The World Wide Web is most often referred to simply as "the Web."

	Internet	**World Wide Web**
Estimated year of Origin	1969, though opening of the network to commercial interests began only in 1988	1993
Name of the first version	ARPANET	NSFnet
Comprises	Network of Computers, copper wires, fibre-optic cables & wireless networks	Files, folders & documents stored in various computers
Governed by	Internet Protocol	Hyper Text Transfer Protocol
Dependency	This is the base, independent of the World Wide Web	It depends on Internet to work
Nature	Hardware	Software

c. List and explain the common features used by all major browsers.

Ans: Browsers are the software that allows you to access the World Wide Web. The most popular browsers are Microsoft's Internet Explorer, Mozilla FireFox, Netscape Browser and Apple's Safari.

Browser Features

Most browers contain the following features. Some of these may be presented as buttons (or icons) in a toolbar. If you don't find a button, you will find a menu item in one of the menus provided. You can usually customize the toolbar to include any or all of these features:

Home Button

This button takes you to the page that has been designated as your "home" page. You can select your "home page" in the browser's Preferences (or Internet Options) section.

Stop Button

Use this button if you want to stop loading the contents of a page.

Reload or Refresh Button

If you suspect the contents of a browser's window may have changed since the last time you viewed it, you should click the Reload or Refresh button **to update the page**.

Back Button

Use this button to go back to the **previous page opened in this particular browser window**. In some browsers, holding the mouse down on this button produces a menu of previous pages, that you can then choose from. In other browsers, there's a little arrow next to the Back button that produces this menu.

Forward Button

Like the Back button, the Forward button takes you to pages that you have **previously seen in a particular browser window**. The Forward button is only available if you have used the Back button and want to go Forward to where you were before.

Address field

This area is where the URL (web page address) for the web page is displayed or entered. (A field is a text entry or display area.) In many browsers, there's a little downward facing arrow next to this field. When you click on the arrow you will see a list of recently visited websites. Clicking one of these URLs will take you to that website. **You can also enter a URL into this field and then press enter or return to go to the website.**

Search Button or Field

In some older browers there is a button to go to the page you have designated as your "search" page. You can select your "search page" in the browser's preferences section or by clicking the "Choose a Search Engine" button in the Search window. **Most browsers now have a search field, at the right end of the main button bar, which you can type into to perform Internet searches.**

Bookmarks or Favorites

You can easily create a shortcut to your favorite web pages by using the Bookmark (or Favorites) menu or button. This is a very important feature and it works a little differently in each browser.

d. Explain the use of RGB color values and Hex values in changing the color of an element in HTML. Give suitable examples.

Ans:

RGB Colors
RGB color values are supported in all browsers.
An RGB color value is specified with: rgb(red, green, blue).
Each parameter (red, green, and blue) defines the intensity of the color as an integer between 0 and 255.
For example, rgb(0,0,255) is rendered as blue, because the blue parameter is set to its highest value (255) and the others are set to 0.

Example:

```
<html>
<body> <h1 style="color:rgb(255,0,0)">Heading</h1>
<h1 style="color:rgb(255,255,0)">Heading</h1>
<h1 style="color:rgb(0,255,0)">Heading</h1>
<h1 style="color:rgb(0,255,255)">Heading</h1>
<h1 style="color:rgb(0,0,255)">Heading</h1>
</body>
</html>
```

Hexadecimal Colors
Hexadecimal color values are also supported in all browsers.
A hexadecimal color is specified with: #RRGGBB.
RR (red), GG (green) and BB (blue) are hexadecimal integers between 00 and FF specifying the intensity of the color.
For example, #0000FF is displayed as blue, because the blue component is set to its highest value (FF) and the others are set to 00.

Example:

```
<html> <body>
 <h1 style="color:#ff0000">Heading</h1>
<h1 style="color:#ffff00">Heading</h1>
<h1 style="color:#00ff00">Heading</h1>
<h1 style="color:#00ffff">Heading</h1>
<h1 style="color:#0000ff">Heading</h1>
</body>
</html>
```

O/P:

Heading
Heading
Heading
Heading
Heading

e. Name the tag used to create a hyperlink. Explain its attributes. Give an example to create a relative hyperlink.

Ans: The anchor element is used to create hyperlinks between a source anchor and a destination anchor. The source is the text, image, or button that links to another resource and the destination is the resource that the source anchor links to.

HTML Links - Syntax
In HTML, links are defined with the <a> tag:
link text

The Most Important Anchor Attributes

- **Href Attribute**

The hypertext reference, or href, attribute is used to specify a target or destination for the anchor element. It is most commonly used to define a URL where the anchor element should link to.

- **target Attribute**

The target attribute specifies where to open the linked document.
The target attribute can have one of the following values:

- _blank - Opens the linked document in a new window or tab
- _self - Opens the linked document in the same window/tab as it was clicked (this is default)
- _parent - Opens the linked document in the parent frame
- _top - Opens the linked document in the full body of the window
- framename - Opens the linked document in a named frame

This example will open the linked document in a new browser window/tab:
Example
Visit google!

Relative File Paths

A relative file path points to a file relative to the current page.

In this example the file path points to a file in the images folder located at the root of the current web:

Example:

```
<html>
<body>
<h2>Using a Relative File Path</h2>
<img src="images/picture.jpg" alt="Mountain" style="width:300px">
</body>
</html>
```

f. Write HTML code to design the following web pages:

MOBILE OPERATING SYSTEMS

1. **1.Android**
2. **iPhone**
3. **Symbian**

MOBILE MANUFACTURERS

- **Samsung**
- **Apple**
- **HTC**

Ans:

```
<html>
<body>
<h1>
        MOBILE OPERATING SYSTEMS
</h1>
<Ol type=1>
        <li>Android</li>
        <li>iPhone</li>
        <li>Symbian</li>
</ol>

<h1>
        MOBILE MANUFACTURERS
</h1>
<ul type=square>
        <li>Samsung</li>
</ul>
<ul type=disk>
        <li>Apple</li>
        <li>HTC</li>
</ul>
</body>
</html>
```

2. Attempt ant three of the following:

a. Design an html page with a client side image map having clickable areas of shapes rectangle, polygon and circle.

The <map> tag is used to define a client-side image-map. An image-map is an image with clickable areas.

The required name attribute of the <map> element is associated with the <img>'s usemap attribute and creates a relationship between the image and the map.

The <map> element contains a number of <area> elements, that defines the clickable areas in the image map.

Example:

```
<html>

<body>


<p>Click on the sun or on one of the planets to watch it closer:</p>


<img src="planets.gif" width="145" height="126" alt="Planets" usemap="#planetmap">


<map name="planetmap">

  <area shape="rect" coords="0,0,82,126" alt="Sun" href="sun.htm">

  <area shape="circle" coords="90,58,3" alt="Mercury" href="mercur.htm">

  <area shape="circle" coords="124,58,8" alt="Venus" href="venus.htm">

</map>


</body>

</html>
```

b. what is the use of redirection to another URL/ Design an html page that automatically redirects the user to page "FY.html" after 5 seconds.

Ans:

Page Redirection
You can use <meta> tag to redirect your page to any other webpage. You can also specify a duration if you want to redirect the page after a certain number of seconds.

Attributes

Attribute	Value	Description
charset	character_set	Specifies the character encoding for the HTML document
content	text	Gives the value associated with the http-equiv or name attribute
http-equiv	content-type default-style refresh	Provides an HTTP header for the information/value of the content attribute
name	application-name author description generator keywords viewport	Specifies a name for the metadata

Example

Following is an example of redirecting current page to another page after 5 seconds. If you want to redirect page immediately then do not specify content attribute.

```
<html>
  <head>
    <title>Meta Tags Example</title>
    <meta name = "keywords" content = "HTML, Meta Tags, Metadata" />
    <meta name = "description" content = "Learning about Meta Tags." />
    <meta name = "revised" content = "Tutorialspoint, 3/7/2014" />
    <meta http-equiv = "refresh" content = "5; url = FY.html" />
  </head>

  <body>
    <p>Hello HTML5!</p>
  </body>

</html>
```

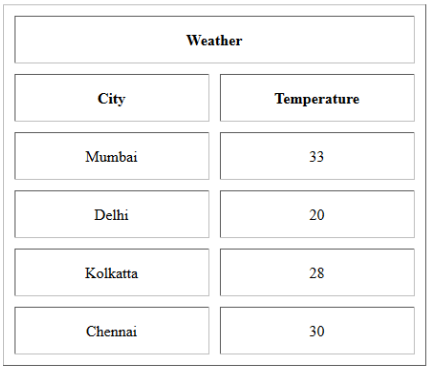
c. Explain the following Semantic tags with example.

i. <header> ii. <nav> iii.<figcaption>

Ans:
<header> – The <header> element specifies a header for a document or section. The <header> element should be used as a container for introductory content. You can have several <header> elements in one document.
<nav> – The <nav> element defines a set of navigation links.
<figcaption> – The purpose of a figure caption is to add a visual explanation to an image.
Example:

```
<html><body>
<header>
<h1>VSIT</h1>
<h5><i>Vidyalankar School of Info Tech</i></h5> </header>

<p>Text based Navigation </p>
<nav>
<a href="contactus.html">Contact US</a>|
<a href="aboutus.html">About Us</a>
</nav>

<p>Graphics based navigation </p>
<nav>
<a href="contactus.html">
<img src="contactus.png"></a>|
<a href="aboutus.html">
<img src="aboutus.png" height=28px width=70px></a>
</nav>

<figure>
<img src="img.jpg" width="500 height="550"> <figcaption>College logo</figcaption> </figure>
</body></html>
```

d. Write html code to design the following web page:



Weather	
City	Temperature
Mumbai	33
Delhi	20
Kolkatta	28
Chennai	30

Ans:

```
<html> <body>
<table border="1" align="center" cellspacing="11">
<tr> <th colspan="2" valign="center"> Weather </th> </tr>
<tr>
<th width="200" align="center" valign="center" >City
</th>
<th width="200" align="center" valign="center" >Temperature
</th>
</tr>
<tr>
<td align="center" valign="center" >Mumbai
</td>
<td  align="center" valign="center" >33
</td>
</tr>
<tr>
<td  align="center" valign="center" >Delhi
</td>
<td  align="center" valign="center" >20
</td>
</tr>
<tr>
<td  align="center" valign="center" >Kolkatta
</td>
<td  align="center" valign="center" >28
</td>
</tr>
<tr>
<td  align="center" valign="center" >Chennai
</td>
<td  align="center" valign="center" >30
</td>
</tr>
</table>
</body> </html>
```

e. How are the following controls created on a form? Checkboxes, Search field, Date field, Submit Button.
Ans:

Checkbox Control: Checkboxes are used when more than one option is required to be selected. They are also created using HTML <input> tag but type attribute is set to checkbox.

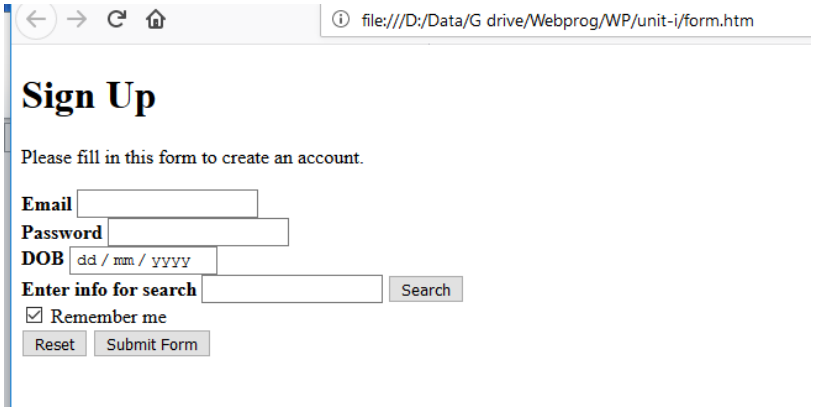
Single-line text input controls: This control is used for items that require only one line of user input, such as search boxes or names. They are created using HTML <input> tag.

Date: <input> elements of type **date** create input fields that let the user enter a date, either using a text box that automatically validates the content, or using a special date picker interface

Submit: This creates a button that automatically submits a form.

Example:

```
<html> <body>
<form action="insert.php">
<h1>Sign Up</h1>
<p>Please fill in this form to create an account.</p>
<b>Email</b>
<input type="text" text="Enter Email" name="email" required>
<br>
<b>Password</b>
<input type="password" text="Enter Password" name="psw" required>
<br>
<b>DOB</b>
<input type="date" text="Enter DOB" name="dob" >
<br>
<b>Enter info for search</b><input type="text" name="search" >
<input type="button" value="Search">
<br>
<input type="checkbox" checked="checked" name="remember"> Remember me
<br> <input type="reset">
<input type="submit" value="Submit Form">
</body>
</html>
```



f. Explain the <audio> tag with all its attributes.

Ans:

The HTML5 <audio> and <video> tags make it simple to add media to a website. You need to set **src** attribute to identify the media source and include a controls attribute so the user can play and pause the media.

Attributes

Attribute	**Value**	**Description**
autoplay	autoplay	Specifies that the audio will start playing as soon as it is ready
controls	controls	Specifies that audio controls should be displayed (such as a play/pause button etc)
loop	loop	Specifies that the audio will start over again, every time it is finished
muted	muted	Specifies that the audio output should be muted
preload	auto metadata none	Specifies if and how the author thinks the audio should be loaded when the page loads
src	URL	Specifies the URL of the audio file

Example:

```
<html>
<body>

<audio controls>
  <source src="horse.ogg" type="audio/ogg">
  <source src="horse.mp3" type="audio/mpeg">
  Your browser does not support the audio element.
</audio>

<p><strong>Note:</strong> The audio tag is not supported in Internet Explorer 8 and earlier versions.</p>

</body>
</html>
```

3. Attempt ant three of the following:

a. What is an assignment operator/ explain any four assignment operators with example.

Ans: JavaScript Assignment Operators

Assignment operators assign values to JavaScript variables.

Operator	Example	Same As
=	x = y	x = y
+=	x += y	x = x + y
-=	x -= y	x = x - y
*=	x *= y	x = x * y
/=	x /= y	x = x / y
%=	x %= y	x = x % y
<<=	x <<= y	x = x << y
>>=	x >>= y	x = x >> y
>>>=	x >>>= y	x = x >>> y
&=	x &= y	x = x & y
^=	x ^= y	x = x ^ y
|=	x |= y	x = x | y
**=	x **= y	x = x ** y

Example:

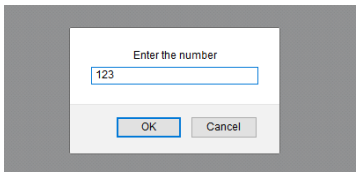
```
<html> <body>
<h2>The += Operator</h2>
<p id="demo"></p>
<script>
var x = 10;
x += 5;
document.getElementById("demo").innerHTML = x;
</script>
</body></html>
```

b. Write a javascript program to accept a number from the user and display the sum of its digits.

Ans:

```
<html>
<head>
<title>sum of digits</title>
</head>
<body>
<script>
  var n=parseInt(prompt("Enter the number"));
  var sum=0,y;
  while(n>0)
  {
        r=n%10;
        sum+=r;
n=parseInt(n/10);
  }
  document.write("Sum of digits is: "+sum);
</script>
</body>
</html>
```

O/P:



c. How are statements labelled in javascript? Explain with the help of example.

Ans: Label statement provides an identifier for a statement that lets you refer to it using a break or continue statement.

Syntax
label :
statements

Parameters

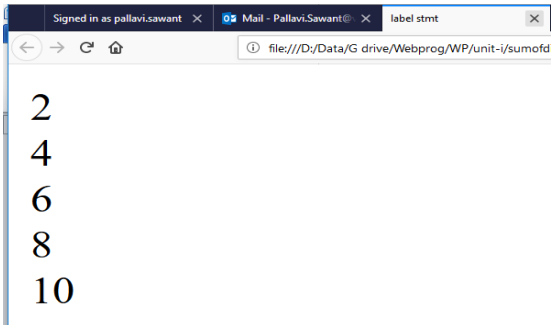
label: Any JavaScript identifier that is not a reserved word.

statements: Group of statements. "Break" can be used with any labeled statement, and "continue" can be used with looping labeled statements.

Example:

```
<html>

<head>

<title>label stmt</title>

</head>

<body>

<script>

even:

for (let i = 1; i <= 10; i++){

  if (i % 2 == 1) continue even;

  document.write(i+ "<br>");

}

</script>

</body>

</html>
```

O/P:



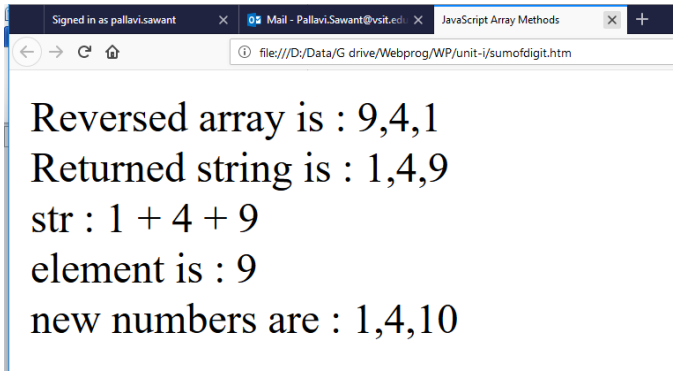
d. What is an array? Explain any four methods of Array object with examples.

Ans: The **Array** object lets you store multiple values in a single variable. It stores a fixed-size sequential collection of elements of the same type. An array is used to store a collection of data, but it is often more useful to think of an array as a collection of variables of the same type.

Syntax
arrayObj = new Array()
arrayObj = new Array([size])
arrayObj = new Array([element0[, element1[, ...[, elementN]]]])
Methods:
pop(): Removes the last element from an array and returns that element.
push(): Adds one or more elements to the end of an array and returns the new length of the array.
reverse(): Reverses the order of the elements of an array -- the first becomes the last, and the last becomes the first.
sort(): Sorts the elements of an array
join(): Joins all elements of an array into a string.

Example

```
<html>  <head>  <title>JavaScript Array Methods</title>  </head>
  <body>
    <script type="text/javascript">
      var numbers = new Array(1, 4, 9);
var arr=numbers.reverse();
      document.write("Reversed array is : " + arr +"<br>");
var sorted = numbers.sort();
      document.write("Returned string is : " + sorted +"<br>");
var str = arr.join(" + ");
      document.write("str : " + str +"<br>");

var element = numbers.pop();
      document.write("element is : " + element +"<br>");
var length = numbers.push(10);
      document.write("new numbers are : " + numbers +"<br>" );

    </script>
  </body>
</html>
```

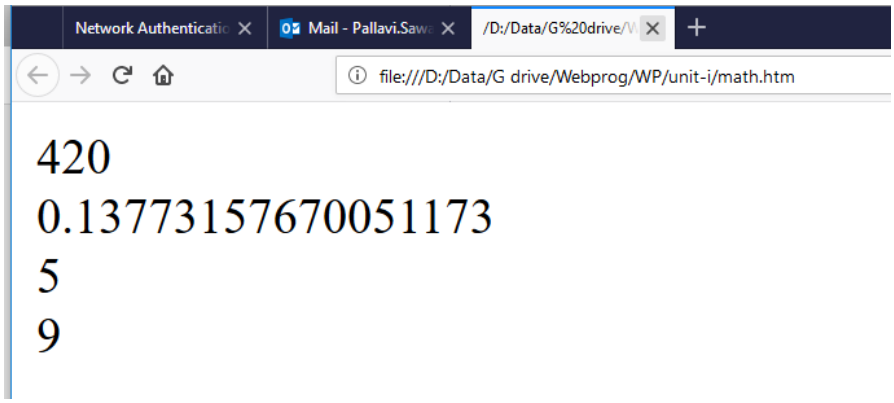


e. Explain the following methods of Math object with example : ceil(), max(), random(), round(), sqrt().

Ans:
ceil()– Returns the smallest integer greater than or equal to given number.
max()– Returns the largest of zero or more numbers.
random()– Returns a pseudo random number between 0 and 1.
round()–Returns the value of given number rounded to the nearest integer.
sqrt()–Returns the square root of given number

Example:

```
<html>  <body>
<script type="text/javascript">
document.write(Math.ceil(3.6));
document.write((Math.max(20,16))+"<br>");
document.write((Math.random())+"<br>");
document.write((Math.round(4.5))+"<br>");
document.write(Math.sqrt( 81 ));
</script> </body> </html>
```



f. What are events? Explain the following events:

i. onMouseOut ii. onKeyUp iii. onSubmit iv. onLoad

Ans:

Events

- HTML events are actions performed on HTML elements.
- When JavaScript is used in HTML pages, JavaScript can react to these events.
- An HTML event can be something the browser does, or something a user does.
- Here are some examples of HTML events:

– When a user clicks the mouse
– When a web page has loaded
– When an image has been loaded
– When the mouse moves over an element
– When an input field is changed
–When an HTML form is submitted
–When a user presses a key

JavaScript allows the user to execute code when events are detected.

- onMouseOut – Fires when the mouse pointer moves out of an element
- onKeyUp – Fires when a user releases a key
- onSubmit – The event occurs when a form is submitted
- onLoad – The event occurs when an object has loaded

Example:

```
<html>
<body onload="loadFunction()">
<form action="/action_page.php" onsubmit="submitFunction()">
<img onmouseout="out()" border="0" src="smiley.gif" alt="Smiley" width="32" height="32">
Enter your name: <input type="text" id="fname" onkeyup="keyupFunction()">
<input type="submit" value="Submit">
</form>
<script>
function out()
{
 alert("onmouseout event");
}
function keyupFunction() {
   var x = document.getElementById("fname");
   x.value = x.value.toUpperCase();
}
function submitFunction() {
   alert("The form was submitted");
}
function loadFunction() {
   alert("Page is loaded");
}
</script> </body> </html>
```

4. Attempt ant three of the following:

a. Explain the different data types in PHP.

Ans: PHP supports the following data types:

PHP String

A string is a sequence of characters, like "Hello world!".
A string can be any text inside quotes. You can use single or double quotes.

PHP Integer

An integer data type is a non-decimal number between -2,147,483,648 and 2,147,483,647.
The PHP var_dump() function returns the data type and value.

PHP Float

A float (floating point number) is a number with a decimal point or a number in exponential form.

PHP Boolean

A Boolean represents two possible states: TRUE or FALSE.

```
$x = true;
$y = false;
```

Booleans are often used in conditional testing.

PHP Array

An array stores multiple values in one single variable.

Example

```
<?php
$x = "Hello world!";
$y = 'Hello world!';
echo $x;
echo "<br>";
echo $y;

$x1 = 5985;
var_dump($x1);

$x2 = 10.365;
var_dump($x2);

$cars = array("Volvo","BMW","Toyota");
var_dump($cars);
?>
```

b. Write a short note on functions in PHP.

Ans:

Functions

Besides the built-in PHP functions, we can create our own functions.
A function is a block of statements that can be used repeatedly in a program.
A function will not execute immediately when a page loads.
A function will be executed by a call to the function.

Syntax

```
function functionName(optional arguments)
{
   code to be executed;
}
```

Example:

```
<html>
<body>

<?php
// Function without Arguments
function writeMsg()
{
   echo "Hello world!";
}
writeMsg();

//Function with Arguments
function familyName($fname)
{
   echo "$fname.<br>";
}
familyName("pallavi");
familyName("dev");

//Functions - Returning values
function sum($x, $y) {
   $z = $x + $y;
   return $z;
}
echo "5 + 10 = " . sum(5,10) . "<br>";
?>

</body>
</html>
```

c. Explain the following string functions with example:

i. lcfirst() ii. strshuffle() iii. strrev() iv. strreplace() v. substr()

Ans:

i. Lcfirst() - Make a string's first character to lowercase.

Example:

```
$str = 'HelloWorld';
$str = lcfirst($str);          // helloWorld
```

ii. str_suffle() - Randomly shuffles a string.
Example:

```
$str = 'abcdef';
$shuffled = str_shuffle($str);
```

iii. strrev() – reverses the string.
Example:

```
echo strrev("Hello world!"); // !dlrow olleH
```

iv. str_replace() - Replace all occurrences of the search string with the replacement string
Example:

```
str_replace("world","Pallavi","Hello world!"); // Hello Pallavi!
```

v. substr() - Find the first occurrence of a string
Example:

```
echo substr("Hello world",6); // world
```

d. Write a php program that removes the first and last element of a one dimensional array and then displays the remaining elements of the array.

Ans:

array_pop() Function : The array_pop() function deletes the last element of an array.

Syntax

array_pop(array)

array_shift() Function: Remove the first element (red) from an array, and return the value of the removed element.

Syntax

array_shift(array)

```
<html>
<head>
<title>Arrays example</title>
</head>
<body>
<?php
$sub = array("OOPs","MA","WP","NSM","GC");
echo array_pop($s), "<br>";
echo array_shift($s), "<br>";

for($x=0; $x<count($sub);$x++)
        echo "<br>", $sub[$x];
?>
<
/body>
</html>
```

e. Write a php program to find the greater of 2 numbers. Accept the number from the user.

Ans:

```
<html>
<head><title>Greater Number</title></head>
<body>
<form method="post" action="greater.php">
Value 1: <input type="number"
name="v1">
<br>
Value 2: <input type="number" name="v2">
<br><input type="submit" value="OK">
</form>
<?php
if(isset($_POST["v1"]) && isset($_POST["v2"]))
{
$n1 = $_POST["v1"];
$n2 = $_POST["v2"];
if($n1 > $n2)
echo "Greater no. = " . $n1;
else if($n2 > $n1)
echo "Greater no. = " . $n2;
else
echo "Both numbers are equal";
}
?>
</body>
</html>
```

f. Explain the superglobals in php.

Ans:

Superglobals — Several predefined variables in PHP are "superglobals", which means they are available in all scopes throughout a script. There is no need to do **global $variable;** to access them within functions or methods.

Below is the list of superglobal variables available in PHP: PHP $GLOBALS

$GLOBALS is a PHP super global variable which is used to access global variables from anywhere in the PHP script (also from within functions or methods).

PHP stores all global variables in an array called $GLOBALS[index]. The index holds the name of the variable.

PHP $_SERVER

$_SERVER is a PHP super global variable which holds information about headers, paths, and script locations.

PHP $_REQUEST

PHP $_REQUEST is used to collect data after submitting an HTML form.

PHP $_POST

PHP $_POST is widely used to collect form data after submitting an HTML form with method="post". $_POST is also widely used to pass variables.

PHP $_GET

PHP $_GET can also be used to collect form data after submitting an HTML form with method="get".

$_GET can also collect data sent in the URL.

5. Attempt any three of the following:

a. Write a php program that uses regular expression functions to display all the uppercase characters from the string "this is a demonstration of php regular expression".

Ans:

Function preg_match_all() : The preg_match_all() function matches all occurrences of pattern in string. It will place these matches in the array pattern_array in the order you specify using the optional input parameter order.

Syntax

int preg_match_all (string pattern, string string, array pattern_array [, int order]);

```
<html>
<head><title>PHP Regular Expressions</title></head>
<body>
<?php
$s = "This is a demonstration of PHP Regular Expression";
$p = "/[A-Z]/";
preg_match_all($p, $s, $matches);
print_r($matches);
?>
</body></html>
```

b. Write a short note on session in php.

Ans: Sessions

- A session is a way to store information (in variables) to be used across multiple pages.
- Unlike a cookie, the information is not stored on the user's computer.
- Session variables hold information about one single user, and are available to all pages in one application.
- A session creates a file in a temporary directory on the server.
- PHP first creates a unique ID for each session which is a random string of 32 hexadecimal numbers.
- A cookie called PHPSESSID is automatically sent to the user's computer to store unique session ID.
- Information stored in session variables will be deleted once the browser is closed.

Starting a PHP Session

A PHP session is easily started by making a call to the **session_start()** function.This function first checks if a session is already started and if none is started then it starts one. It is recommended to put the call to **session_start()** at the beginning of the page.

Session variables are stored in associative array called **$_SESSION[]**. These variables can be accessed during lifetime of a session.
Make use of **isset()** function to check if session variable is already set or not.

Destroying a PHP Session

A PHP session can be destroyed by **session_destroy()** function. This function does not need any argument and a single call can destroy all the session variables. If you want to destroy a single session variable then you can use **unset()** function to unset a session variable.
Example:

```
<?php
  session_start();

  if( isset( $_SESSION['counter'] ) ) {
    $_SESSION['counter'] += 1;
  }else {
    $_SESSION['counter'] = 1;
  }

  $msg = "You have visited this page ".  $_SESSION['counter'];
  $msg .= "in this session.";
?>

<html>  <head>       <title>Setting up a PHP session</title>    </head>
    <body>
    <?php  echo ( $msg ); ?>
  </body>

</html>
```

c. Write a php program to accept roll no, student name and percentage from the user and save the values in table student(rno,sname, percentage) in database college.

Ans:

form.html page

```
<html>

<head><title>User Input Form</title></head>

<body>

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

Roll No: <input type="text" name="rno">

<br>Name: <input type="text" name="sname">

<br>Percentage: <input type="text" name="per">

<br><input type="submit">

</form></body></html>
```

insert.php page

```
<html>

<head><title>

Save

Data</title></head>

<body>
<?php
$con n= mysql_connect("localhost","root","");
mysql_select_db("college", $conn);
$sql="INSERT INTO student VALUES($_POST[rno],'$_POST[sname]',$_POST[per])";
mysql_query($sql,$conn);
echo "Data saved successfully";
mysql_close($conn);
?>
<body></html>
```

d. Explain the mail() function.

Ans: The mail() function allows you to send emails directly from a script.

Syntax

mail(to,subject,message,headers,parameters);

Where

to : Required. Specifies the receiver / receivers of the email

subject: Required. Specifies the subject of the email. This parameter cannot contain any newline characters

message: Required. Defines the message to be sent. Each line should be separated with a LF (\n). Lines should not exceed 70 characters

headers: Optional. Specifies additional headers, like From, Cc, and Bcc. The additional headers should be separated with a CRLF (\r\n)

parameters: Optional. Specifies an additional parameter to the send mail program

Example:

```
<html>
  <head>
    <title>Sending HTML email using PHP</title>
  </head>
  <body>

    <?php
      $to = "xyz@somedomain.com";
      $subject = "This is subject";

      $message = "<b>This is HTML message.</b>";
      $message .= "<h1>This is headline.</h1>";

      $header = "From:abc@somedomain.com \r\n";

      $retval = mail ($to,$subject,$message,$header);

      if( $retval == true ) {
        echo "Message sent successfully...";
      }else {
        echo "Message could not be sent...";
      }
    ?>
      </body> </html>
```

e. Write a php program to create a cookies using php and retrieve its value.

Ans:

Form.html page

```
<html>
<head><title>Form</title></head>
<body>
<form method="post" action="cookie.php">
Username: <input type="text" name="uname">
<p><input type="submit">
</form>
</body></html>
```

cookie.php page

```
<?php
setcookie("username",$_POST['uname']);
?>
<html><head><title>Cookie</title></head>
<body>
<?php
if (isset($_COOKIE["username"]))
{
echo "Cookie created";
echo "<p><b> Welcome " .
$_COOKIE["username"] . "</b>";
}
else
echo "cookie not created";
?> </body></html>
```

f. Explain the following php/mysql functions with example:

i. mysqlquery() **ii. Mysqlerror()**

Ans:

i.mysql_query()Function: This function performs a query against the database.
Syntax:

mysql_query(query, connection)

ii. Mysqlerror() Function: This function returns the text of the error message from previous MySQL operation

Syntax:
mysql_error ();

Example:

```
<?php
  $con=mysql_connect("localhost","root","");
  if(!$con)
    die('could not connect:'.mysql_error());
  if(mysql_query("create database College",$con))
    echo "Database Created successfully";
  else
    echo "Error creating database:".mysql_error();
?>
```