

1. HTML

1. To make a real web page we need to add some elements and rename the file with .html extension. The <html> tag identifies a section of html code opening with <html> and closing with </html>.

```
<html>
    <head>
        <title> This is our first example</title>
    </head>
</html>
```

2. Then we have the <body> tag which contains several new tags.
 tag is used to change the line. Some predefined font tags are also there. <i> tag for italics. tag for bold. Another way of adding breaks is to define <p> tag which is for writing paragraphs. We have 6 heading tags <h1>,<h2>,<h3>,<h4>,<h5>,<h6> whose font size goes on decreasing.
3. For commenting code we have <!--This is a comment-->
4. Hyperlinks are one of the strongest aspects for making a web page.
<a href=<http://www.somepage.com>> It creates an anchor point for the link to jump to.
5. Next we have an important tag for making lists which also makes the navigation bar for each and every website.

There are two types of lists- unordered and ordered lists.

```
<ul>
    <li>Hyundai</li>
    <li>Maruti</li>
    <li>Audi</li>
</ul>
```

6. Another attribute is making of a table. A table starts with <table> and ends with </table>. Each row begins with <tr> and ends with </tr> and in between lies the column defined with the tag <td>.....</td>
7. HTML can be used to place images within pages. This is done using the
8. Then we can also make simple html forms using the tag <form>
<form action="form.php" method="post"></form> The action attribute tells the html where to send the collected information while the method attribute describes the way to send it.
<input type="text"> This accepts characters and numbers into a text box.
<input type="password"> This is similar to the text input but the typed can't be seen instead the asterisk will be seen.
<input type="submit"> This will allow the form to get submit
<input type="button"> This makes a button available

2. PHP

1. PHP stands for Hypertext Preprocessor.
2. PHP is a server side scripting language.
3. PHP is open source language and is written in C programming language.
4. PHP is not compiled, it is interpreted.

5. PHP is object oriented programming language. It is used to create dynamic web applications.
6. File extension in PHP is .php
7. In PHP keywords, methods, classes are not case sensitive. Variables are case sensitive.
8. Variables are denoted as \$x,\$y etc

```
<?php
    $x=5;
    $y=6;
    $z=$x+$y;
    echo $z;
?>
```

9. To copy the contents of one web page into another we use "include".

include "header.php"

If there is any mistake in the code the "include" will execute the rest of the code by just giving a warning.

10. Super global variables are created by php implicitly. There are 9 global variables used in php . They are \$_GET,\$_POST, \$_COOKIE, \$_SESSION

11. Session tracking and management in PHP

In session tracking we can identify a client on server site. There are 4 techniques of session tracking. These are cookie, session, URL rewriting, Hidden from field

12. Cookie is used to track the client. Cookie is a small piece of text file created by server and stored on client computer.

To create a cookie - setcookie("user","manak")

Cookie is always made before starting of html code.

Cookie is client side property.

13. Session is a server side property.

Session is a time interval in which we can identify a client.

Session is used to transform information from one page to another page.

When a php script starts a session, a special file is created in temporary directory on the server, this is where the registered session variables and values are stored.

3. DATABASE

1. It is a collection of data or collection of tables. Mostly classified in 2 parts: DBMS-Database Management System and RDBMS- Relational DBMS
2. Primary key- It is used to identify each record uniquely. A table contents has only one column as a primary key. It can't be updated.
3. Unique key- A table can have multiple unique keys. It can have null value but a primary key value is must.
4. We can create database connectivity in PHP by 3 ways. These are-
 - *Procedural Database connectivity
 - *Object Oriented Programming
 - *PHP data object
5. Normalization is a process of optimization in which the potential for redundancy is removed. It follows a series of stages called normal forms.

6. MYSQL is a very popular DBMS. It is open source but, unlike other projects such as Apache, is owned by MYSQL AB. Probably the most popular pairing for languages and database systems is PHP and MYSQL, particularly for Web Applications.
7. The SQL language allows you to access and manipulate your data. It contains many commands on your various operations on the information you have stored, allowing complex queries to be developed.

4. JAVASCRIPT

1. Inserting javascript into a web page is much like inserting any other html content. The tags used to add Javascript in HTML are `<script>....</script>`. The code surrounded by these tags are called as script block.
2. JS is a client side scripting language. It is object based language.
3. JS is used for client side validation. To create image slider, to create animation, to create dynamic drop down box.
4. `alert()`: This invokes a dialog box on the web page.
5. There are majorly two types of language. First one is Statically Typed Language where each variable and expression type is already known at compile time. Once a variable is declared to be of a certain type, it can not hold values of other data type.
6. JS is a dynamically typed scripting language that is js variables can receive different data types over time.
7. We can load a JS file into another JS file using a `<script>` tag inside the DOM that script will be downloaded and executed immediately. But now there are new techniques introduced which are *AJAX Technologies and *Concatenate files
8. When the browser loads the page, the browser has a built-in interpreter that reads the JS code in it and runs it. The built-in browser interpreter is basically the "JS virtual machine".
9. JS is the client side scripting language and PHP is the server side scripting language. JS is used as client side to check and verify client details and PHP is server side used to interact with database.

5. WORDPRESS

1. Wordpress is a content management system based on PHP and MYSQL that is usually used with the MYSQL or MariaDB database.
2. Wordpress is easy to customize with themes and plugins.
3. It is SEO friendly.