**PHP NOTES**

<https://www.youtube.com/watch?v=OK_JCtrrv-c&ab_channel=freeCodeCamp.org>

**What is PHP**

* Php is basically a server-side scripting language embedded in a HTML.
* Php stands for Hypertext Pre-processor.
* Php allows web developers to create dynamic content and interact with databases.
* It is known for its simplicity, speed and flexibility.
* On cmd type **echo %path%** to see the paths that are been made global in the environment variables.
* On cmd type **php -v** to see the version.
* When we want to use php then we have to run php on web server.
* It is a programming language that runs on a web-server.
* We use php on web server to interact with the HTML pages.
* Web server comes with php.
* Command prompt is used to interact with the computer with the text command.
* To create a web-server for php we have to write the following command on cmd:

**php -S localhost:4000** (S is in capital)

* The above line is used to run a webserver on a local machine in port 4000.
* Don’t exit the cmd window when you start webserver or else the server will get close.
* PHP is very tightly coupled with HTML language.
* We basically write our php code inside a HTML layout.
* PHP tag:

**<?php**

**----------------**

**----------------**

**?>**

* Anything that is been written inside this php tag is considered as a PHP code.
* To print Hello world in the screen we use the following syntax:
  + **echo(“Hello World”);**
  + echo is a print statement in php.
  + We can also print <h1>Koushik’s Website</h1> using echo command.
* PHP codes are always executed in order.
* **Variables:** It is a container that contains the pieces of information in our program.
  + **$** symbol is used to create a variable in php.
  + E.g. **$name = “Koushik Sadhu”;**
  + To embed variable data in a echo statement we just need to write **$** symbol along with that variable name.
  + E.g. **echo(“My name is *$name*”);**

**DATA-TYPES IN PHP:**

* $phrase = "PHP is a server side scripting language."; **// String Type.**
* $number = 30; **// Integer Type.**
* $cgpa = 9.52; **// Float Type.**
* $isMale = true; **// Boolean Type.**
* **Null** in PHP specifies no value.

**STRINGS IN PHP:**

* $str = “This is a String.”; // storing inside a string variable.
* echo $str; //to print

**STRING FUNCTIONS:**

**$str = “Koushik”;**

* strtolower($str) – koushik
* strtoupper($str) – KOUSHIK
* strlen($str) – 7
* To fetch the character from a particular index of a string: **$str[1]**
* **“Sadhu”[0]** – S // Fetching the first character by putting index position in a square bracket**.**
* strsubstr($str, 1, 4); -- oush // start from index 1 and go up to 4 ahead. 4 is basically the length

**NUMBERS IN PHP:**

* echo "20 + 5 = ",20+5;
* echo "20 - 5 = ",20-5;
* echo "20 \* 5 = ",20\*5;
* echo "20 / 5 = ",20/5;
* echo "20 % 5 = ",20%5;
* echo "20 + 5 \* 4 = ",20+5\*4;
* echo "(20 + 5) \* 4 = ",(20+5)\*4;
* echo "2 ^ 4 = ",pow(2, 4);
* echo "root(16) = ",sqrt(16);
* $num = 10;
* echo "num = ",$num;
* $num++;
* echo "num++ = ",$num;
* $num--;
* echo "num-- = ",$num;
* ++$num;
* echo "++num = ",$num;
* --$num;
* echo "--num = ",$num;
* $num += 20;
* echo "num += 20 = ",$num;
* $num -= 20;
* echo "num -= 20= ",$num;

**MATH FUNCTIONS:**

* echo "abs(-100) = ",abs(-100),"<br>";
* echo "pow(2, 10) = ",pow(2, 10),"<br>";
* echo "sqrt(25) = ",sqrt(25),"<br>";
* echo "max(100, -10) = ",max(100, -10),"<br>";
* echo "min(100, -10) = ",min(100, -10),"<br>";
* echo "ceil(20.000009) = ",ceil(20.436584),"<br>";
* echo "floor(20.999999) = ",floor(20.436584),"<br>";

**USER INPUTS:**

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