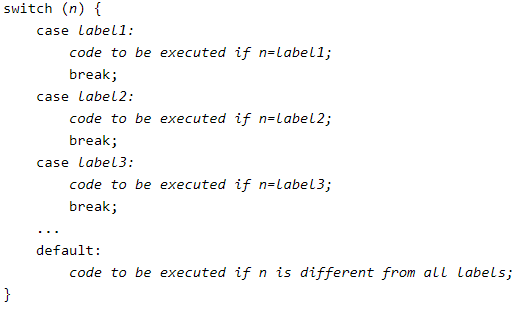
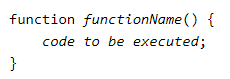
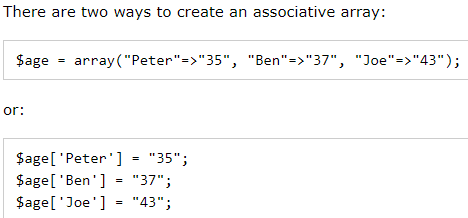
**PHP Basic**

* a php script start with <?php and ends with ?>
* // and # single line comment, /\* \*/ multiple line comment
* in PHP variable start with $ sign
* variable scopes: local, global and static
* outside function variable: global; inside function variable : local; inside function variable with static ahead: static
* inside a function to access global variable: global $x, $y
* Print value in PHP: echo and print
* echo: faster not return value
* print: slower and will return value
* PHP supports: String, Integer, Float, Boolean, Array, Object, Null, Resource
* define(name, value): create a constant (constant are global)
* if(condition){ code}else{code}:if-else statement
* **switch in PHP**
* PHP loops: while, do...while, for, foreach(for in python)
* PHP function:



* declare(strict\_types=1): avoid different type doing operation
* function functionname(var a, var b) : return type{} **：** the ": type" after function will define function return type
* Array: $var = array("0","1","2")
* count($var): get the length of an Array
* sort($var): sort array in Ascending order
* rsort($var): sort array in descending order
* asort($var): sort array according to value
* ksort($var): sort array according to key
* Associative Arrays



* Superglobals: $GLOBALS, $\_SERVER, $\_REQUEST, $\_POST,$\_GET
* Date: d(day), m(month), Y(year), l(day of the week) ex: data("Y-m-d l")
* Time: H(24 hours), h(12 hours), i(minutes), s(seconds),a(am or pm) ex: date("h:i:sa")
* Create a date: mktime(hour, minute, second, month, day, year)
* strtotime(time, now): convert a human readable date string into a Unix timestamp
* include and require : call the php function in the file
* Include always run the script even they cannot find the php file. Require will not execute the script if statement return error
* Cookie: used to identify a user
* setcookie(name, value, expire, path, domain, secure, httponly)
* setcookie(name, value, negative-expire): negative time will delete the cookie
* Sessions us to store information to be use across multi pages
* a session started with the session\_start() function
* session\_unset() and session\_destroy() will remove all global sessions
* Filter: Validating data(determine if the data is in proper form) and Sanitizing data(remove any illegal character form the data)
* filter\_var(): check the variable, the type of check to use
* JSON(JavaScript Object Notation): syntax for storing and exchanging data
* json\_encode(): encode a value to JSON format
* json\_decode(): decode a JSON object into PHP object or an associative array

**String**

* var\_dump: print variable type
* strlen(): return the length of the string
* str\_word\_count(): Count Words in a String
* strrev(): reverse a String
* strpos(string, word): search for word within a string
* str\_replace(text,word,string): replace text inside string with word

**File Handling**

* fopen():open/create a file (more operation that fread())
* fread(): read a file
* fclose(): close a file
* fgets(): read single line
* feof(): check the end of file
* fgetc(): read single character form the file
* fwrite($file,$txt): write to a file
* php.ini configure file setting: to use file upload, need add file\_uploads = On inside php.ini

**OOP**

* Class: Biosphere Object: animals
* Class getter and setter, object input detail value
* $this->name = $name : this keyword refers to current obj
* \_\_destruct() function: php will auto call this function at the end of the script
* \_\_construct() function: php will auto call when you create an object
* public: can be accessed from everywhere (default)
* protected: can be accessed within the class and subclasses
* private: can ONLY accessed within the class
* Inheritance: parent class and child class, child class extends parent class
* Overriding method: child class can have same method in parent class
* final keyword: prevent method overriding
* const: constants cannot be change once it is declared
* Abstract: parent class has a named method but empty inside, need its child class to fill out the tasks
* PHP only supports single inheritance: a child class cna inherit only from one single parent
* trait keyword: used to declare methods that can be used in multiple classes and can have multi-inheritance
* static methods and properties: can be called directly without creating an instance of a class