

## Argument and Types

Type determines the way data can be managed in your scripts. You use the string type to display character data, for example, and manipulate such data with string functions. Integers are used in mathematical expressions; Booleans are used in test expressions, and so on. These categories are known as primitive types. On a higher level, though, a class defines a type. A Dog object, therefore, belongs to the primitive type object, but it also belongs to the Dog class type.

So an instance of the object, would be a type, which belongs to the primitive type object, but it ALSO belongs to the Dog class.

## Primitive Types

PHP is a loosely typed language which means you can use a variable and declare it to hold any data type. For example, the variable \$number can hold the value of 2 an integer or the string “two” within the same scope.

You can use a built in PHP type-function for checking what type a variable is. These functions accepts a variable or value and returns *true* if this argument is of the relevant type.

| type checking function | type     | description   |
|------------------------|----------|---|
| is_bool()              | boolean  | one of the two special values true or false   |
| is_integer()           | integer  | a whole number  |
| is_double()            | double   | a floating point number (a number with a decimal point)                                 |
| is_string()            | string   | character data  |
| is_object()            | object   | an object   |
| is_array()             | array    | an array  |
| is_resource()          | resource | a handle for identifying and working with external resources such as databases or files |
| is_null()              | null     | an unassigned value   |

The reason why we want to check the type of variable is to make sure we know what type it is when we work with method and function arguments.

## For Practice

Make three functions where you check whether the type you pass in is correct or not. Google PHP and then the type-checking function and see what you can learn!

Example:

```
<?php
if (is_string('hello'))
```

```
echo "It is a string";  
else  
echo 'It is not a string';  
var_dump(is_string('XYZ'));  
var_dump(is_string('8008'));  
var_dump(is_string(123));  
var_dump(is_string(false));  
?>
```

As you can see, the output should be:

```
//It is a string bool(true) bool(true) bool(false) bool(false)
```

Write in your notes why you think it outputs this along with your three other examples.