Learning PHP: Programming Review

- PHP is one of many programming languages
- Different languages have their advantages and disadvantages and are therefore suited for different jobs
- PHP is most commonly used to process data on web servers

Variables

- These are used to contain data
- They must be identified by a name
- In some languages it is necessary to provide a data type when declaring a variable
- PHP is sometimes referred to as a loosely typed language because it doesn't have many of these more strict requirement
- Format for declaring a variable is: $name;

Assigning a Value

- Use the = operator
- $welcome_text = "Hello and welcome to my website.";
- $user_id = 987;

Selection/Decision Making

- All programming languages make use of a decision making construct

- The general format in php is as follows:

```
if (condition) {
        body
}
```

Examples

```
if ($username == "webmaster") {
        echo "Please enter your password below";
}
if ($username == "webmaster") {
echo "Please enter your password below";
} else {
echo "We are sorry but you are not a recognised user";
}
```

```
if ($enteredpass == $password){}
if ($age < 13)
if ($name == "" || $email == "" || $password ==
"") {
        echo "Please fill in all the fields";
}
```

PHP Comparison Operators

Comparison Operators		
Example	Name	Result
$a == $b	Equal	TRUE if $a is equal to $b after type juggling.
$a === $b	Identical	**TRUE** if $a is equal to $b, and they are of the same type.
$a != $b	Not equal	TRUE if $a is not equal to $b after type juggling.
$a <> $b	Not equal	**TRUE** if $a is not equal to $b after type juggling.
$a !== $b	Not identical	**TRUE** if $a is not equal to $b, or they are not of the same type.
$a < $b	Less than	**TRUE** if $a is strictly less than $b.
$a > $b	Greater than	**TRUE** if $a is strictly greater than $b.
$a <= $b	Less than or equal to	**TRUE** if $a is less than or equal to $b.
$a >= $b	Greater than or equal to	**TRUE** if $a is greater than or equal to $b.

Logical Operators

Logical Operators		
Example	Name	Result
$a and $b	And	**TRUE** if both $a and $b are **TRUE**.
$a or $b	Or	**TRUE** if either $a or $b is **TRUE**.
$a xor $b	Xor	**TRUE** if either $a or $b is **TRUE**, but not both.
! $a	Not	**TRUE** if $a is not **TRUE**.
$a && $b	And	**TRUE** if both $a and $b are **TRUE**.
$a || $b	Or	**TRUE** if either $a or $b is **TRUE**.

Mix 'n' Match PHP and HTML

- PHP blocks can be included inside of HTML
- The file must still be saved with .php to be considered PHP
- Example:

```
<body>
 <h1>My Example</h1>
<?php //your php code here ?>
<b>Here is some more HTML</b>
<?php //more php code ?>
</body>
```

Comments

```php
<?php
   echo 'This is a test'; // This is a one-line c++ style comment
   /* This is a multi line comment
      yet another line of comment */
   echo 'This is yet another test';
   ?>
```

Exercises

1. Create a form to gather the following information: name and password. Upon submission of the form check that the password is "1zx234" and inform the user if they entered it correctly (use their name in the response).

2. Create a form that allows a user to enter the cost of 4 items. Upon submission, calculate the cost, including taxes. Display the subtotal and total with taxes. Provide a 2% discount on a final total exceeding $100.00. Make sure to display the discount amount and the new total minus the discount.

DO NOT FORGET TO UPLOAD AND LINK YOUR WORK UNDER YOUR UNIT 1 WEBPAGE ON YOUR CLASS WEBSITE!!!!