Let's get some PHP

PHP is a server-side backend language used to generate dynamic HTML. In this week's lab, we'll go through basic PHP and make an webpage that can produce contents on demand with a SQL database.

First PHP web page

Like some other programming languages, a php file needs to be interpreted by an interpreter. Create a new text file named `index.php` and paste the following code:

```
<!DOCTYPE html>
<html>
<body>

<?php
echo "My first PHP script!";
?>

</body>
</html>
```

Run `php -S localhost:8080 index.php` from command line. Use a browser to open localhost:8080/index.php, see what it produces.

Terminate the interpreter with `control-C`. Now, try use a for loop to produce an unordered list, from `A` to `Z`.

PHP with MySQL

You've already seen the `IMDB` database from previous `MySQL` section. Let's make a webpage that connects to it and produces contents dynamically.

Create a new file called `movies.php` with the following contents.

```
<!DOCTYPE html>
<html>
<body>
```

```
<?php
$serverName="mathlab.utsc.utoronto.ca";
$userName="your_utoid";
$password="your_utorid";
$dbName="IMDB_SMALL";
$conn = new mysqli($serverName, $userName, $password, $dbName);

$year=$_GET['greaterThan'];

$sql="select name from movies where year>" . $year . ";";
$result = $conn->query($sql);

if ($result->num_rows > 0) {
    // output data of each row
    echo "<ul>";
    while($row = $result->fetch_assoc()) {
        echo "<li>" . $row["name"] . "</li>";
    }
    echo "</ul>";
} else { echo "0 results"; }
?>

</body>
</html>
```

Run this file using the same command as above (`ssh` to MathLab if there's no `MySQLi` package on the BV473 machine). Use a browser to open http://localhost:8080/index.php, what happened?

Try again with this url, what does it produce? Why?

After you figure it out, write a similar web page, but showing a list of movies where their rank is higher than a certain number (1 to 10).