Aufgabe 1: Setup your Development Environment

1.1 Choose an IDE

There are several good IDE that you can use to code PHP and HTML. You can use your favourite IDE or Visual Studio Code.

1.2 Install PHP, Apache Web Server, and MySQL

To make it easy, please see slide from lecture.

Aufgabe 2: Control Statement

2.1 Create a program for grade converter from percentage to point using `if-else`. For example, if your project is 89 then the program will convert it to 1.7 and show it to user. (see the Table conversion below)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>100-95.5%</td>
</tr>
<tr>
<td>1.3</td>
<td>95.4 – 90.9%</td>
</tr>
<tr>
<td>1.7</td>
<td>90.8 – 84.8%</td>
</tr>
<tr>
<td>2.0</td>
<td>84.7 – 80.3%</td>
</tr>
<tr>
<td>2.3</td>
<td>80.2 – 75.8%</td>
</tr>
<tr>
<td>2.7</td>
<td>75.7 – 69.7%</td>
</tr>
<tr>
<td>3.0</td>
<td>69.6 – 65.2%</td>
</tr>
<tr>
<td>3.3</td>
<td>65.1 – 60.6%</td>
</tr>
<tr>
<td>3.7</td>
<td>60.5 – 54.4%</td>
</tr>
<tr>
<td>4.0</td>
<td>54.3 – 50%</td>
</tr>
<tr>
<td>5.0</td>
<td>0 – 49.9%</td>
</tr>
</tbody>
</table>

2.2 Refer to 2.1, please make it using `if-elseif-else`.

2.3 Refer to 2.1, please make it using `switch-case`.

Aufgabe 3: Looping

```php
<?php
for($i=1; $i<=5; ++$i){
    for($j=1; $j <= $i; ++$j){
        echo "*";
    }
}
```
```php
    echo "<br/>";
}
?>

Output of this code is

* 
**
***
****
*****

3.1 Refer to example above, please make a program using for to display

*****
****
***
**
*

3.2 Refer to example above, please make a program using for to display

*****
****
***
**
*

3.3 Please solve problem in 3.1 using while.
3.4 Please solve problem in 3.2 using do-while.
3.5 Please find a looping's problem that can solve by while but can't solve by for (or vice-versa). Give an example!

Aufgabe 4: Function and Arrays

4.1 Create a concatenation function for arrays which is the function will have 2 parameter for 2 arrays and return the result as arrays. These two parameter must have same length, if not then function will return error string notification.

Ex.: $param1 = ("hello", "halo", "foo")
$param2 = ("world", "steven", "bar")

$result = fun($param1,$param2)
The content of $result is ("hello world", "halo steven", "foo bar")

4.2 Create an extractor function to print the content of arrays in problem 4.1. Ex.
fun($result) will print
Content_1 = "hello world"
Content_2 = "halo steven"
Content_3 = "foo bar"
Aufgabe 5: Combine

5.1 Text-to-speech engine can only read text, so it will be a problem when the input is number. Could you help the developer to create a function to get a number and convert it into text. Maximum value of number is 100000.
Ex.: if user key-in 110 your function will take 110 as parameter and convert it into text: one hundred ten. If input is greater than 100000, your function will show “maximum exceeded”.

5.2 Imagine you work as a junior programmer in Multimedia Company, and this is your first project: create a program to display text-based triangle using looping (for or while or do-while) and control statement (if-else or switch-case). This is the space code in html: &nbsp

**********
   *****
  ***
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