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Student Class: SD2-A

1. Poem

```php
<?php

echo '<p> Adam </p>';
echo '<p> Had \'em </p>';

echo '<ul>';
echo '<p><li> Without flowing wine, </li></p>';
echo '<p><li> How to enjoy lovely </li></p>';
echo '<p><li> Cheery blossoms </li></p>';
echo '</ul>';

?>
```
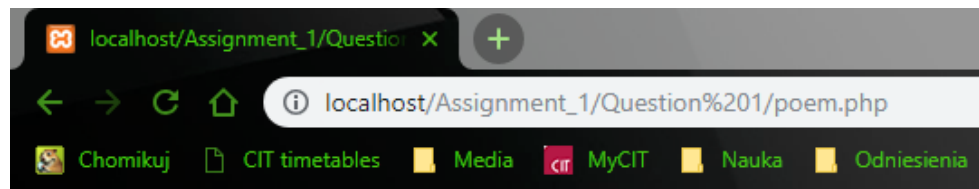
Adam

Had 'em

- Without flowing wine,
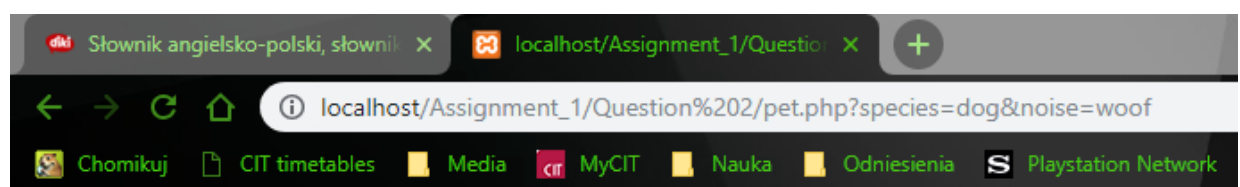- How to enjoy lovely
- Cheery blossoms

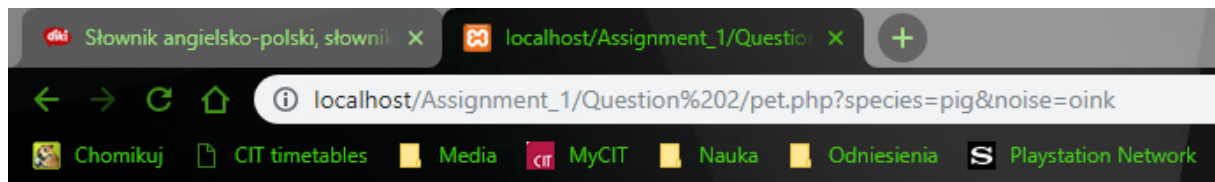## 2. Pet

```php
<?php
    $species = $_GET['species'];
    $noise = $_GET['noise'];

    echo '<p>Your '.$species.' goes '.$noise.'-'.$noise.'.</p>'
?>
```

Your dog goes woof-woof.

Your pig goes oink-oink.

3. Kitsune bakuchi Game

Part 1

```php
<?php

    $roll_1 = rand(1,6);
    $roll_2 = rand(1,6);

    echo '<p>The value of first dice: '.$roll_1.'</p>';
    echo '<p>The value of second dice: '.$roll_2.'</p>';

    $stake = $_GET['stake'];

    $winnings = 0;

    if ($roll_1 == $roll_2) {
            $winnings = $stake * 4;
```

```php
		echo '<p>You won '.$winnings.' eurines. Congratulations!</p>';

	}


	else {

		echo '<p>Your winnings: '.$winnings.'</p>';

		echo '<p>The dice have to roll the same amount of pips. Better
luck next time!</p>';

	}


?>
```
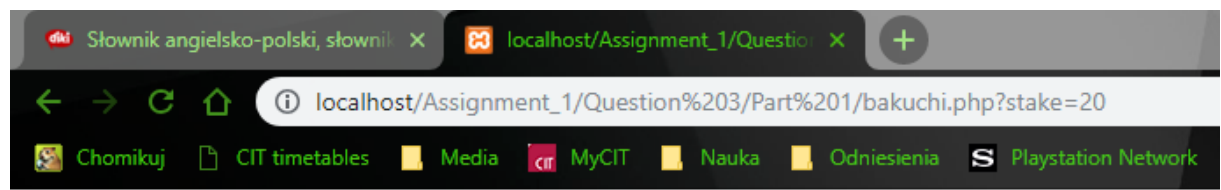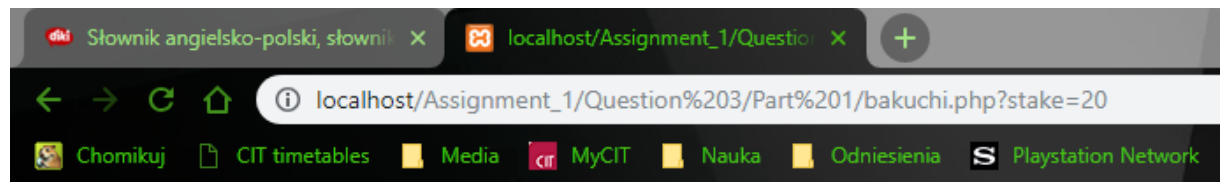

The value of first dice: 2

The value of second dice: 5

Your winnings: 0

The dice have to roll the same amount of pips. Better luck next time!

The value of first dice: 4

The value of second dice: 4

You won 80 eurines. Congratulations!

Part 2

```php
<?php

    $roll_1 = rand(1,6);

    $roll_2 = rand(1,6);

    $roll_3 = rand(1,6);

    echo '<p>The value of first dice: '.$roll_1.'</p>';

    echo '<p>The value of second dice: '.$roll_2.'</p>';

    echo '<p>The value of third dice: '.$roll_3.'</p>';

    $stake = $_GET['stake'];

    $winnings = 0;
```
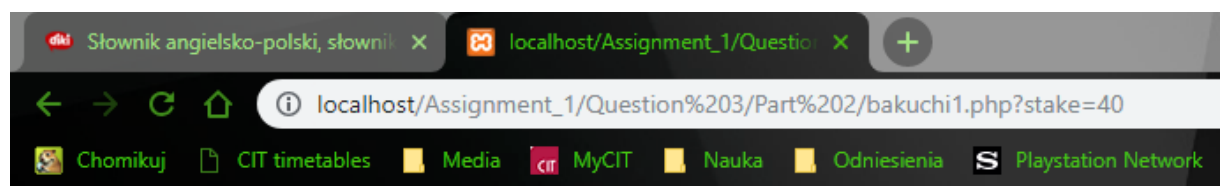
```php
    if ($roll_1 == $roll_2 && $roll_1 == $roll_3) {

        $winnings = $stake * 4;

        echo '<p>You won '.$winnings.' eurines. Congratulations!</p>';

    }


    else {

        echo '<p>Your winnings: '.$winnings.'</p>';

        echo '<p>All the dice have to roll the same amount of pips. Better
luck next time!</p>';

    }


?>
```
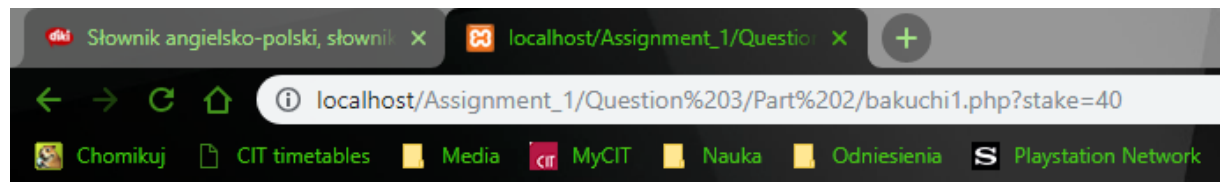
The value of first dice: 6

The value of second dice: 5

The value of third dice: 1

Your winnings: 0

All the dice have to roll the same amount of pips. Better luck next time!

The value of first dice: 6

The value of second dice: 6

The value of third dice: 6

You won 160 eurines. Congratulations!

Part 3

```php
<?php

    $roll_1 = rand(1,6);

    $roll_2 = rand(1,6);

    $roll_3 = rand(1,6);


    echo '<p>The value of first dice: '.$roll_1.'</p>';

    echo '<p>The value of second dice: '.$roll_2.'</p>';

    echo '<p>The value of third dice: '.$roll_3.'</p>';


    $stake = $_GET['stake'];


    $winnings = 0;
```
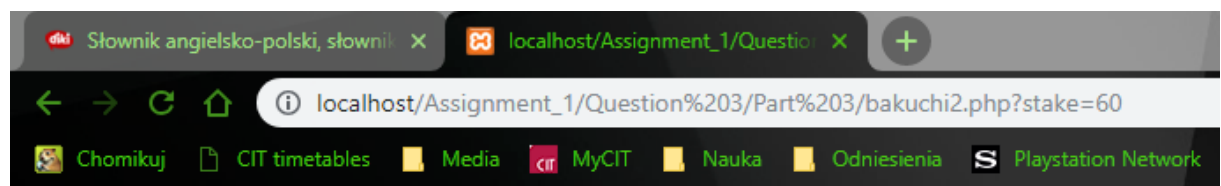
```php
if ($roll_1 == $roll_2 && $roll_1 == $roll_3) {

$winnings = $stake * 4;

}


echo '<p>Your winnings: '.$winnings.' eurines</p>';


?>
```
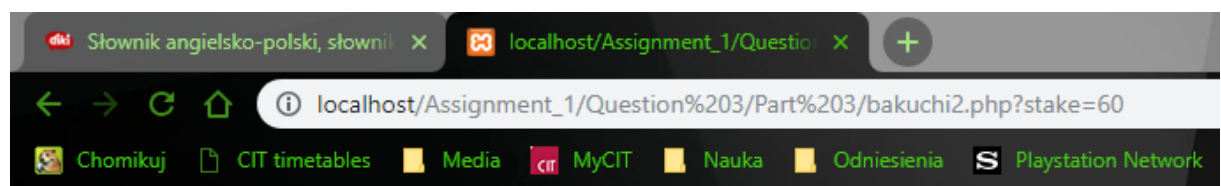
The value of first dice: 5

The value of second dice: 5

The value of third dice: 1

Your winnings: 0 eurines

The value of first dice: 3

The value of second dice: 3

The value of third dice: 3

Your winnings: 240 eurines

4. Tax System

```php
<?php

    $usage = $_GET['num_of_gallons'];


    $amount_due = 0.00;
    $flat_rate = 120.00;
    $tax = 0.05;
    $additional_tax_amount = 60.00;


    if ($usage == 0) {
            $amount_due = $flat_rate;
    }
    elseif ($usage > 0 && $usage <= 12999) {
            $amount_due = $flat_rate + ($usage * $tax);
    }
    else {
            $amount_due = $flat_rate + ($usage * $tax) + ((int)(floor($usage -
12000) / 1000) * $additional_tax_amount);
    }


    echo '<p>You have to pay '.$amount_due.' eurines.</p>';


?>
```
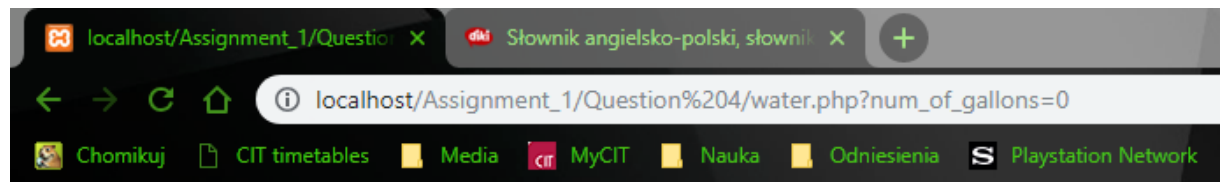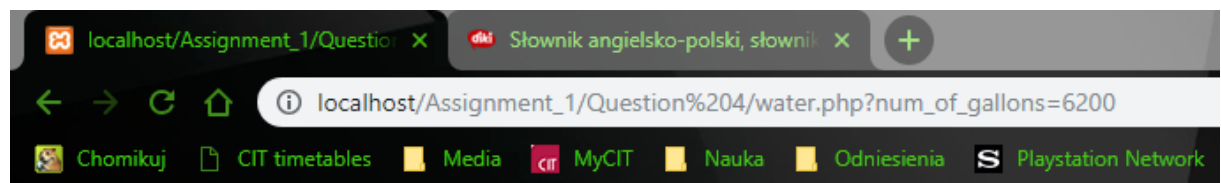
You have to pay 120 eurines.

You have to pay 430 eurines.
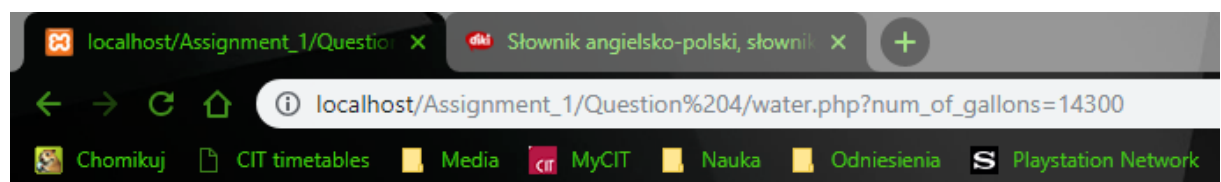
You have to pay 955 eurines.

5. Pint Conversion

Part 1

```php
<?php

echo '<link rel="stylesheet" type="text/css" href="table.css">';

$pints = $_GET['num_pints'];
$quarts = 0.5 * $pints;
$fluid_ounces = $pints * 16;
$gills = $fluid_ounces / 4;

echo'<table>

    <caption>A pint of plain is your only man</caption>
        <tr>
            <th>Pints</th>
            <th>Quarts</th>
            <th>Fluid ounces</th>
            <th>Gills</th>
        </tr>
        <tr>
            <td>'.$pints.'</td>
            <td>'.$quarts.'</td>
            <td>'.$fluid_ounces.'</td>
            <td>'.$gills.'</td>
        </tr>

    </table>';
```

```php
?>
```

Part 2

```php
<?php

    echo '<link rel="stylesheet" type="text/css" href="table.css">';


    $pints = $_GET['num_pints'];
    $millilitres = $pints * 568.26125;


    echo'<table>


        <caption>A pint of plain is your only man</caption>
            <tr>
                <th>Pints</th>
                <th>Ml</th>
            </tr>
            <tr>
```

```php
                        <td>'.round($pints, 1).'</td>
                        <td>'.round($millilitres, 1).'</td>
                </tr>


        </table>';


?>
```
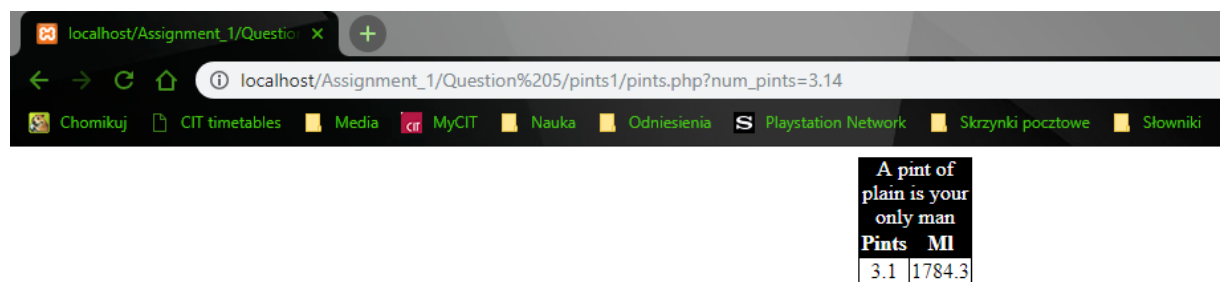

6. Coin Conversion

```html
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="utf-8">
        <title>How rich you are!</title>
    </head>
    <body>
        <form action="cash.php" method="get">
        <div>
```

```html
            <label for="number_of_nickels">Nickels:</label>

            <input type="text" name="number_of_nickels" id="number_of_nickels" size="5" maxlength="5" placeholder="0">

        </div>

        <div>

            <label for="number_of_dimes">Dimes:</label>

            <input type="text" name="number_of_dimes" id="number_of_dimes" size="5" maxlength="5" placeholder="0">

        </div>

        <div>

            <label for="number_of_quarters">Quarters:</label>

            <input type="text" name="number_of_quarters" id="number_of_quarters" size="5" maxlength="5" placeholder="0">

        </div>

        <div>

            <label for="number_of_half_dollars">Half dollars:</label>

            <input type="text" name="number_of_half_dollars" id="number_of_half_dollars" size="5" maxlength="5" placeholder="0">

        </div>

        <div>

            <label for="number_of_dollars">Dollars:</label>

            <input type="text" name="number_of_dollars" id="number_of_dollars" size="5" maxlength="5" placeholder="0">

        </div>

        <div>

            <label for="number_of_2_dollar_notes">2 dollar notes:</label>
```

```html
            <input type="text" name="number_of_2_dollar_notes" id="number_of_2_dollar_notes" size="5" maxlength="5" placeholder="0">
        </div>
        <div>
            <label for="number_of_5_dollar_notes">5 dollar notes:</label>
            <input type="text" name="number_of_5_dollar_notes" id="number_of_5_dollar_notes" size="5" maxlength="5" placeholder="0">
        </div>
        <div>
            <label for="number_of_10_dollar_notes">10 dollar notes:</label>
            <input type="text" name="number_of_10_dollar_notes" id="number_of_10_dollar_notes" size="5" maxlength="5" placeholder="0">
        </div>
        <div>
            <label for="number_of_20_dollar_notes">20 dollar notes:</label>
            <input type="text" name="number_of_20_dollar_notes" id="number_of_20_dollar_notes" size="5" maxlength="5" placeholder="0">
        </div>
        <div>
            <label for="number_of_50_dollar_notes">50 dollar notes:</label>
            <input type="text" name="number_of_50_dollar_notes" id="number_of_50_dollar_notes" size="5" maxlength="5" placeholder="0">
        </div>
        <div>
```

```html
            <label for="number_of_100_dollar_notes">100 dollar
notes:</label>

            <input type="text" name="number_of_100_dollar_notes"
id="number_of_100_dollar_notes" size="5" maxlength="5" placeholder="0">

        </div>

        <div>

            <input type="submit" value="Convert">

            <input type="reset" value="Reset the value">

        </div>

        </form>

    </body>

</html>
```

Nickels: 2
Dimes: 3
Quarters: 4
Half dollars: 7
Dollars: 8
2 dollar notes: 9
5 dollar notes: 10
10 dollar notes: 6
20 dollar notes: 5
50 dollar notes: 1
100 dollar notes: 11
Convert   Reset the value

```php
<?php

        $nickels = $_GET['number_of_nickels'];

        $dimes = $_GET['number_of_dimes'];

        $quarters = $_GET['number_of_quarters'];

        $half_dollars = $_GET['number_of_half_dollars'];

        $dollars = $_GET['number_of_dollars'];

        $two_dollar_notes = $_GET['number_of_2_dollar_notes'];

        $five_dollar_notes = $_GET['number_of_5_dollar_notes'];

        $ten_dollar_notes = $_GET['number_of_10_dollar_notes'];

        $twenty_dollar_notes = $_GET['number_of_20_dollar_notes'];

        $fifty_dollar_notes = $_GET['number_of_50_dollar_notes'];

        $one_hundred_dollar_notes = $_GET['number_of_100_dollar_notes'];



        $nickels_to_cents = $nickels * 5;

        $dimes_to_cents = $dimes * 10;

        $quarters_to_cents = $quarters * 25;

        $half_dollars_to_cents = $half_dollars * 50;

        $dollars_to_cents = $dollars * 100;


        $two_dollar_note_in_cents = 200;

        $two_dollar_notes_to_cents = $two_dollar_note_in_cents *
$two_dollar_notes;


        $five_dollar_note_in_cents = 500;
```

```php
$five_dollar_notes_to_cents = $five_dollar_note_in_cents *
$five_dollar_notes;


$ten_dollar_note_in_cents = 1000;

$ten_dollar_notes_to_cents = $ten_dollar_note_in_cents *
$ten_dollar_notes;


$twenty_dollar_note_in_cents = 2000;

$twenty_dollar_notes_to_cents = $twenty_dollar_note_in_cents *
$twenty_dollar_notes;


$fifty_dollar_note_in_cents = 5000;

$fifty_dollar_notes_to_cents = $fifty_dollar_note_in_cents *
$fifty_dollar_notes;


$one_hundred_dollar_note_in_cents = 10000;

$one_hundred_dollar_notes_to_cents =
$one_hundred_dollar_note_in_cents * $one_hundred_dollar_notes;


$total_amount = $nickels_to_cents + $dimes_to_cents +
$quarters_to_cents + $half_dollars_to_cents + $dollars_to_cents

+ $two_dollar_notes_to_cents + $five_dollar_notes_to_cents +
$ten_dollar_notes_to_cents + $twenty_dollar_notes_to_cents

+ $fifty_dollar_notes_to_cents + $one_hundred_dollar_notes_to_cents;



echo '<p>You have '.$total_amount.' cents.</p>';
```

```
?>
```


You have 139090 cents.
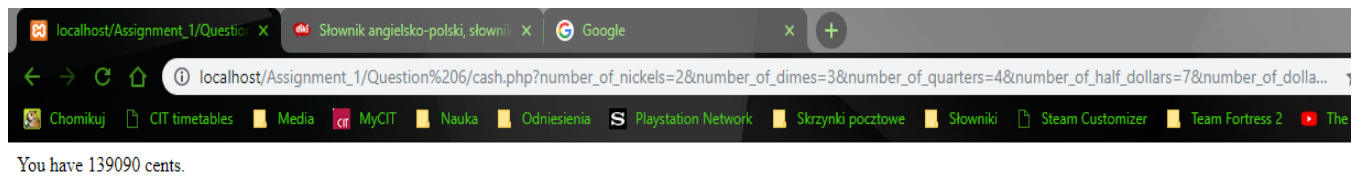
7. Sorting

```php
<?php

    $number1 = $_GET['num1'];

    $number2 = $_GET['num2'];

    $number3 = $_GET['num3'];


    if ($number1 > $number2 && $number1 > $number3 && $number2 > $number3) {

            echo '<p>'.$number1.', '.$number2.', '.$number3.';</p>';

    }


    if ($number3 > $number2 && $number3 > $number1 && $number2 > $number1) {

            echo '<p>'.$number3.', '.$number2.', '.$number1.';</p>';

    }
```

```php
    if ($number1 > $number3 && $number1 > $number2 && $number3 >
$number2) {

        echo '<p>'.$number1.', '.$number3.', '.$number2.';</p>';

    }


    if ($number3 > $number2 && $number3 > $number1 && $number1 >
$number2) {

        echo '<p>'.$number3.', '.$number1.', '.$number2.';</p>';

    }


    if ($number2 > $number3 && $number2 > $number1 && $number1 >
$number3) {

        echo '<p>'.$number2.', '.$number1.', '.$number3.';</p>';

    }


    if ($number2 > $number3 && $number2 > $number1 && $number3 >
$number1) {

        echo '<p>'.$number2.', '.$number3.', '.$number1.';</p>';

    }


    if (($number1 == $number3 || $number3 == $number1) && ($number2
!= $number1 || $number2 != $number3)) {

        echo '<p>'.$number3.', '.$number1.', '.$number2.';</p>';

    }


    if (($number2 == $number3 || $number3 == $number2) && ($number1
!= $number2 || $number1 != $number3)) {

        echo '<p>'.$number3.', '.$number2.', '.$number1.';</p>';
```
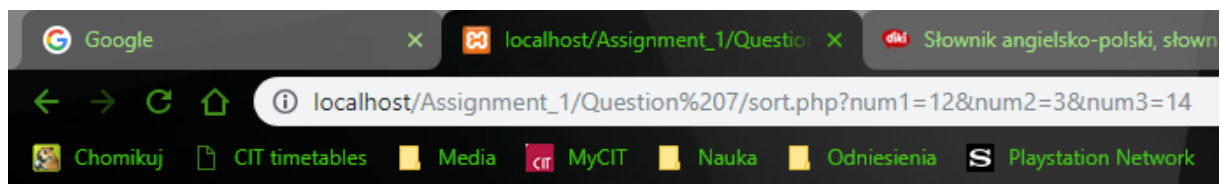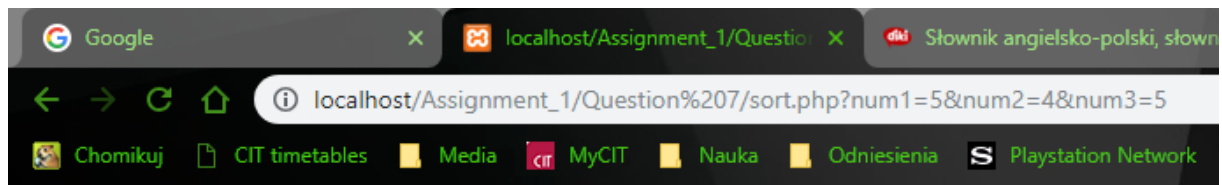
```php
        }


        if (($number2 == $number1 || $number1 == $number2) && ($number3
!= $number1 || $number3 != $number2)) {

                echo '<p>'.$number1.', '.$number2.', '.$number3.';</p>';

        }



        if (($number2 == $number1 || $number1 == $number2) && ($number3
== $number1 || $number3 == $number2)) {

            echo '<p>'.$number2.', '.$number1.', '.$number3.';</p>';

        }


?>
```


14, 12, 3;

5, 5, 4;

8. Voting System

```
<!DOCTYPE html>
<html lang="en">
    <head>
        <meta charset="utf-8">
        <title>Voting rights</title>
    </head>
    <body>
        <form action="votes.php" method="get">
        <fieldset>
    <legend>Which age category do you belong to?</legend>
    <div>
      <input type="radio" name="age" value="child" id="child">
      <label for="child">Less than 18 years old</label>
      <input type="radio" name="age" value="adult" id="adult">
      <label for="adult">18 years old and above</label>
```

```
            </div>

                </fieldset>

                <fieldset>

            <legend>Where do you live?</legend>

            <div>

                <input type="radio" name="residency" value="ireland"
id="ireland">

                <label for="ireland">In Ireland</label>

                <input type="radio" name="residency" value="abroad"
id="abroad">

                <label for="abroad">Outside of Ireland</label>

            </div>

                </fieldset>

                <fieldset>

            <legend>What is your nationality?</legend>

            <div>

                <input type="radio" name="nationality" value="irish" id="irish">

                <label for="irish">Irish</label>

                <input type="radio" name="nationality" value="british"
id="british">

                <label for="british">British</label>

                <input type="radio" name="nationality" value="other_eu"
id="other_eu">

                <label for="other_eu">Other EU</label>

                <input type="radio" name="nationality" value="non_eu"
id="non_eu">

                <label for="non_eu">Non-EU</label>

            </div>
```

```html
        </fieldset>

        <div>

            <input type="submit" value="Submit the details" />

            <input type="reset" value="Reset the values" />

        </div>

        </form>

    </body>

</html>
```



```php
<?php


    $age = $_GET['age'];

    $country_of_residence = $_GET['residency'];

    $nationality = $_GET['nationality'];
```

```php
        if ($age != "adult") {

                echo '<p>Sorry, you cannot vote, you must be at least 18 years of
age.</p>';

        }


        if ($age == "adult" && $nationality == "irish") {

                echo'<p>You can vote in every election and referendum.</p>';

                echo'<ul>

                        <li>Local</li>

                        <li>European</li>

                        <li>D&#225;il</li>

                        <li>Presidential</li>

                        <li>Referenda</li>

                        </ul>';

        }


        if ($age == "adult" && $country_of_residence == "ireland" &&
$nationality == "british") {

                echo'<p>You can vote in the following voting systems:</p>';

                echo'<ul>

                        <li>Local</li>

                        <li>European</li>

                        <li>D&#225;il</li>

                        </ul>';

        }
```

```php
        if ($age == "adult" && $country_of_residence != "ireland" &&
$nationality == "british") {

                echo'<p>You can vote in the following voting systems:</p>';

                echo'<ul>

                        <li>European</li>

                        <li>D&#225;il</li>

                        </ul>';

        }


        if ($age == "adult" && $country_of_residence == "ireland" &&
$nationality == "other_eu") {

                echo'<p>You can vote in the following voting systems:</p>';

                echo'<ul>

                        <li>Local</li>

                        <li>European</li>

                        </ul>';

        }


        if ($age == "adult" && $country_of_residence != "ireland" &&
$nationality == "other_eu") {

                echo'<p>You can only vote in the following voting system:</p>';

                echo'<ul>

                        <li>European</li>

                        </ul>';

        }


        if ($age == "adult" && $country_of_residence == "ireland" &&
$nationality == "non_eu") {
```

```php
        echo'<p>You can only vote in the following voting system:</p>';

        echo'<ul>

            <li>Local</li>

            </ul>';

    }


    if ($age == "adult" && $country_of_residence != "ireland" &&
$nationality == "non_eu") {

        echo '<p>Sorry, you cannot vote with this status.</p>';

    }


?>
```
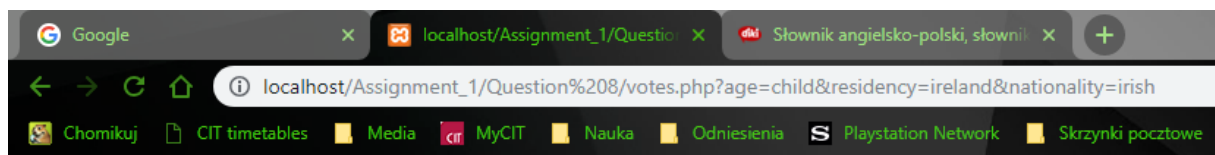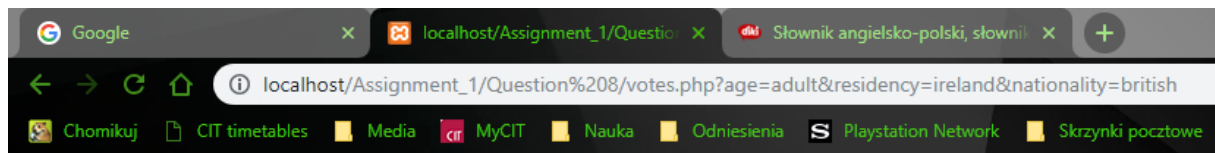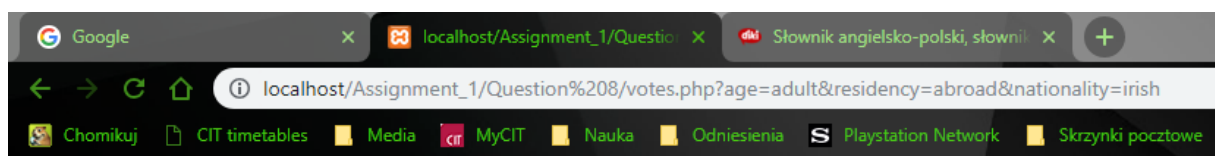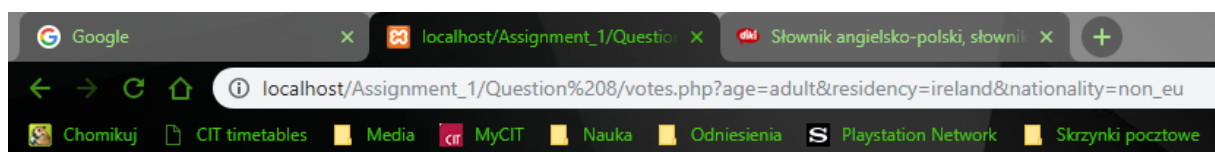
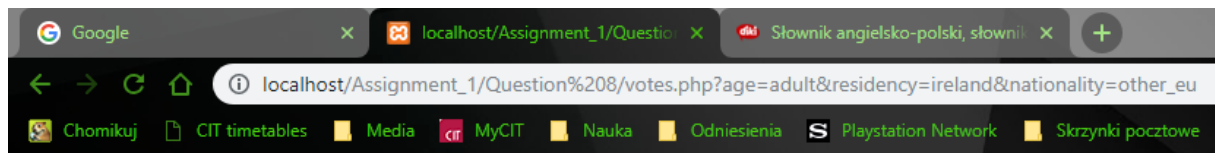You can vote in the following voting systems:

- Local
- European
- Dáil

You can vote in every election and referendum.

- Local
- European
- Dáil
- Presidential
- Referenda

You can only vote in the following voting system:

- Local

You can vote in the following voting systems:

- Local
- European

9. Does my BMI look big in this?

```php
<?php

    $user_weight = $_GET['weight'];

    $user_height = $_GET['height'];


    $BMI = round(($user_weight / ($user_height ** 2)), 2);


    echo '<p>Your BMI: '.$BMI.'</p>';


    $ideal_BMI = 21.75;

    $user_ideal_weight = round(($ideal_BMI * ($user_height ** 2)), 2);


    if ($user_weight != $user_ideal_weight) {

        echo '<p>Your ideal weight: '.$user_ideal_weight.' kg</p>';

    }

    else {

        echo '<p>You achieved your ideal weight!</p>';
```

```php
		}

if ($BMI <= 15) {

		echo '<p>You are very severely underweight.</p>';

}
elseif ($BMI > 15 && $BMI <= 16) {

		echo '<p>You are severely underweight.</p>';

}
elseif ($BMI > 16 && $BMI <= 18.5) {

		echo '<p>You are underweight.</p>';

}
elseif ($BMI > 18.5 && $BMI <= 25) {

		echo '<p>You are at normal (healthy weight).</p>';

}
elseif ($BMI > 25 && $BMI <= 30) {

		echo '<p>You are overweight.</p>';

}
elseif ($BMI > 30 && $BMI <= 35) {

		echo '<p>You are moderately obese (Obese Class I).</p>';

}
elseif ($BMI > 35 && $BMI <= 40) {

		echo '<p>You are severely obese (Obese Class II).</p>';

}
elseif ($BMI > 40 && $BMI <= 45) {

		echo '<p>You are very severely obese (Obese Class III).</p>';

}
```

```php
        elseif ($BMI > 45 && $BMI <= 50) {

                echo '<p>You are morbidly obese (Obese Class IV).</p>';

        }

        elseif ($BMI > 50 && $BMI <= 60) {

                echo '<p>You are super obese (Obese Class V).</p>';

        }

        else {

                echo '<p>You are hyper obese (Obese Class VI).</p>';

        }


?>
```
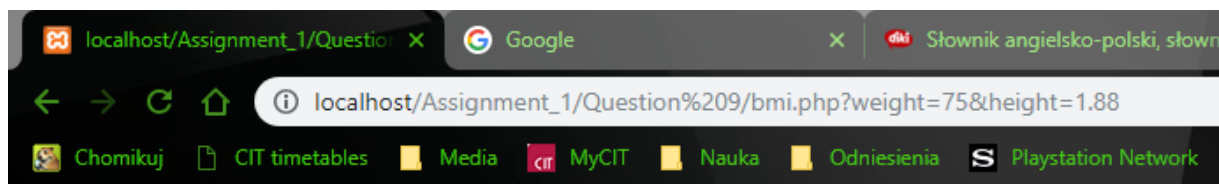

Your BMI: 21.22

Your ideal weight: 76.87 kg

You are at normal (healthy weight).

10. Stamp Duty

```php
<?php


        $type_of_house = $_GET['house'];
```

```php
$type_of_buyer = $_GET['buyer'];

$type_of_occupation = $_GET['occupation'];

$property_price = $_GET['price'];

$property_area = $_GET['area'];


$stamp_duty_0 = 0;

$stamp_duty_7 = $property_price * 0.07;

$stamp_duty_9 = $property_price * 0.09;


if (($type_of_house == "new" && $type_of_buyer == "first" &&
$type_of_occupation == "owner") || ($property_area < 125) ||
($property_price <= 125000)) {

        echo '<p>Total price: '.$property_price.' eurines at an exemption
of Stamp Duty.</p>';

    }

    elseif ($property_price > 125000 && $property_price <= 1000000) {

        echo '<p>Total price: '.($property_price + $stamp_duty_7).'
eurines at Stamp Duty 7%</p>';

    }

    elseif ($property_price > 1000000) {

        echo '<p>Total price: '.($property_price + $stamp_duty_9).'
eurines at Stamp Duty 9%</p>';

    }


?>
```
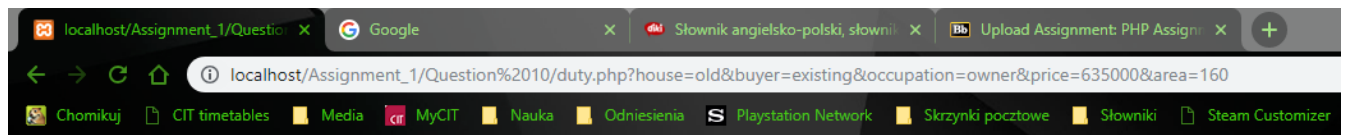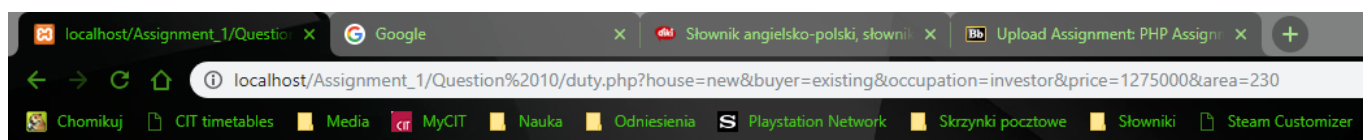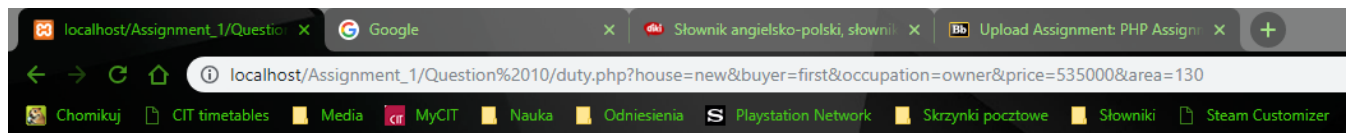
Total price: 679450 eurines at Stamp Duty 7%

Total price: 1389750 eurines at Stamp Duty 9%

Total price: 535000 eurines at an exemption of Stamp Duty.