Exercises Data Types

Exercise 1: Personal information

Create two variables (**'x'**, **'y'**) add them, and multiply it by 5. Assign the output to a new variable **'z'**.

*(Expected output -> The total is **(z).***

```php
$x = 5;
$y = 10;

$z = $x + $y;

echo "The total is " . $z;
```

Exercise 2: Value added tax

Create two variables '**price**' and '**vat**'. Create a new variable '***totalPrice***' and calculate the vat on the price and print out the price, vat and total price.

(Expected output-> Price: '***price***'
Vat: '***vat***'
Total price: '***totalPrice***'

```php
$price = 100;
$vat = 0.21;

$totalPrice = ($price * $vat) + $price;

echo "Price: " . $price;
echo "VAT: " . $vat;
echo "Total price: " . $totalPrice;
```

Exercise 3: Average

Create three variables '***x***', '***y***', '***z***' and calculate the average '**average**' of the numbers and print it out on the screen. Be aware that the average is a decimal number, so use a function number_function in PHP. (Read more about number_function right here).

*(Expected output-> The average is '**average**'*

```php
$x = 5;
$y = 3;
$z = 6;

$average = ($x + $y + $z) / 3;

echo number_format($average, 2, ',', ' ');
```

Exercise 4: Countries and capitals

Create an array ***'countries'*** that displays 5 countries and the capital names.

(Expected output -> The capital of Netherlands is Amsterdam
The capital of Germany is Berlin
The capital of Thailand is Bangkok).

```php
$countries = array("Netherlands" => "Amsterdam", "Germany" => "
    Berlin", "Thailand" => "Bangkok");

foreach ($countries as $key => $value) {
    echo "The capital of " . $key . " is " . $value;
    echo "<br>";
}
```

Exercise 5: Centimeters to inches

Create an integer '***cmToInch***' that converts a number of centimeters '***cm***' to inches '***inch***'. (tip: 1 centimeter is equivalent to 0,39 inch).

*(Expected output-> (**cm**) centimeters is (**inch**) inches.*

```php
$cm = 100;

$cmToInch = $cm * 0.39;

echo $cm . " centimeters is " . $cmToInch . " inch";
```

Exercise 6: Expenses

Create an array '***expenses'*** with your biggest expenses of the month. Loop through the array and add the expenses in a integer '***totalAmount'***. Finally, display the total expenses that you had and the amount of values '***amountOfExpenses'*** you had stored inside of your array.

*(Expected output -> My (**amountOfExpenses**) biggest expenses were (**totalamount**)*

```php
$expenses = array(60, 100, 85);

$totalAmount = 0;
$x = 0;

foreach ($expenses as $expense) {
    $totalAmount = $expense + $totalAmount;
    $x = $x + 1;
}

echo "My " . $x . " biggest expenses were " . $totalAmount;
```

Exercise 7: Weather conditions

Create an array '***weather'*** of weather conditions with the following values: rain, sunshine, clouds, hail, sleet, snow, wind. Using the array variable for all the weather conditions, echo the following statement to the browser:

We've seen all kinds of weather this month. At the beginning of the month, we had snow and wind. Then came sunshine with a few clouds and some rain. At least we didn't get any hail or sleet.

```
$weather = array("Rain", "Sunshine", "Clouds", "Hail", "Sleet", "
    Snow", "Wind");

echo "We've seen all kinds of weather this month. At the
    beginning of the month, we had " . $weather[5] . " and " . $
    weather[6] . ". Then came " . $weather[1] . " with a few " . $
    weather[2] . " and some " . $weather[0] . " at least we
    didn't get any " . $weather[3] . " or " . $weather[4];
```