

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).

```
$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'

```
$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*'

```
$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).

```
$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.

```
$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**)

```
$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];
```