Challenge 11 - PHP

Part 1

Write two PHP functions.
Function 1: Converts decimal number to a binary number.
Function 2: Converts decimal number to Roman number. Maximum number that can be converted is 3999. If the number is greater than 3999, the function should print an error message.

Part 2

Write two more PHP functions.
Function 3: Converts a binary number to a decimal number.
Function 4: Converts a roman number to a decimal number.

Part 3

Create a function that will check if a given number is roman, decimal or binary.

- All decimal numbers should have a plus or a minus sign ('+' or '-'), indicating if they are positive or negative (eg. -10, +20, +4, -8). Binary numbers should be without a sign (eg. 01, 100, 001, 10). If the number doesn't have a sign and does not consist of only zeroes and ones, it should still be considered a decimal number (ex. 545, 3135 etc.)
- If a decade number starts with zero and has a sign in front of it, print an error (eg. +0123).

- Call the previous functions to convert the number into the other two types of numbers. For example, if the given number is decimal, call the function to convert it to roman and binary.
- Increase the limit for the roman numbers converter to 3999999. If a number is greater than 3999999, print an error message
- Create an array with 10 numbers of all types (decade, binary, roman). Iterate through the array and print each number in all three numbering systems.

Bonus: Try to make one of the functions for converting numbers recursive.

Evaluation:

Part 1 of the exercise is **1** point
Part 1 and Part 2 of the exercise are **3** points
Part 1, Part 2 and Part 3 are **5** points

Deadline:

Two weeks after its presentation, 23:59h end of the day.