**The palindrome challenge**

A palindrome is a string that is read the same forwards as it is backwards, for example "mom" or "eye".

Please create a program that completes the following:

* Find the palindromes between 1 and 1 million that are also palindromes in its binary form. E.g 585 = 10010010012 and print how many of those were found
* Print the number of cycles needed to find the answer. A cycle is as defined as every time you execute the same line of code within a routine of your program.
* Explain what is the computational complexity of your algorithm.
* Create a REST api where you expose a method to find the palindromes between x and y being the parameters and that returns the answer to the 3 above items in JSON format.
* Upload your project to GitHub and share with us the origin of your repository.

Write the code in your prefered language.

Write unit tests where you consider that are helpful.

Happy coding! ;)