

Problem of the Week-3: Palindromic Numbers

Palindromic numbers are numbers that remain the same when their digits are reversed. For example, 15351 is a palindromic number.

In base 16, how many numbers between 1_{16} and $1,000,000_{16}$ are palindromes?

As always, explain and justify your answer.

Posting Date 9/24/11. Submit solutions to Noah Aydin, Mathematics Department, RBH 319 (e-mail or hard-copy, but hard copy submissions must include a time stamp) by 4 pm on 10/05/11.