CSE 102 : Online on 1D Array & Function (A2)

Given two integers *n*, *m* ($1 \leq n \leq 10^6$, $0 \leq m \leq 9$) find a *prime palindrome number* less than or equal to *n* which contains the digit *m* the highest no. of times. If there are multiple such numbers, finding any one of them will suffice. In case of no prime palindrome number $\leq n$, containing the digit *m*, you can print -1. A number is called a *palindrome number* if it is the same as its reverse (e.g. 11, 202, 1881 etc.)

Sample Input	Sample Output
10 7	7
20 4	-1
1000 1	11

Explanation (Case 3): The palindrome numbers within 1000 are 0, 1, ... , 9, 11, 22, ... , 99, 101, 111, ... , 999. Among all these numbers the digit 1 appears in 111 three times, but 111 is not a prime number. 1 appears twice in many palindrome numbers like 11, 101, 121, ... among which 11 is prime (and so are some others) and so it is a correct output.

You must write at least two functions, one for palindrome checking and another for counting the number of appearances of a digit in a number. Figure out their parameters and return types by yourself.