A conjecture about an infinity of sets of integers, each one having an infinite number of primes

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Abstract. In this paper, inspired by one of my previous papers posted on Vixra, I make, considering the sum of the digits of an odd integer, a conjecture about an infinity of sets of integers, each one having an infinite number of primes and I also make, considering the sum of the digits of a prime number, two other conjectures.

Conjecture 1:
For an infinity of odd positive integers m there is an infinite set of primes with the property that the sum of their digits is equal to m + 1.

Conjecture 2:
For an infinity of primes p there is an infinite set of primes with the property that the sum of their digits is equal to p + 1.

Comment: such a prime p I conjectured to be, in a previous paper posted on Vixra, the number 13.

Conjecture 3:
There is an infinite number of values the sum of the digits of the numbers p + 1, where p is odd prime, may have.

Note:
For a list with prime numbers with the property that the sum of their digits is equal to an even number see the sequence A119449 in OEIS.

Note:
We will refer hereinafter with D(m) to the set of primes with the property that the sum of their digits is equal to m + 1, where m is an odd integer.

The sequence D(1):
: 101 (...).

The sequence D(3):
: 13, 31, 103, 211, 1021, 1201 (...).

The sequence D(5):

: (...).

The sequence D(7):

: 17, 53, 71, 107, 233, 251, 431, 503, 521, 701, 1061, 1151, 1223 (...).

The sequence D(9):

: 19, 37, 73, 109, 127, 163, 181, 271, 307, 433, 523, 541, 613, 631, 811, 1009, 1063, 1117, 1153, 1171 (...).

The sequence D(11):

: (...).

The sequence D(13):

: 59, 149, 167, 239, 257, 293, 347, 419, 491, 563, 617, 653, 743, 761, 941, 1049, 1193, 1229, 1283, 1319 (...).

The sequence D(15):

: 79, 97, 277, 349, 367, 383, 439, 457, 547, 619, 673, 691, 709, 727, 853, 907, 1069, 1087, 1249 (...).

The sequence D(17):

: (...).

The sequence D(19):

: 389, 479, 569, 587, 659, 677, 839, 857, 929, 947, 983, 1289 (...).

The sequence D(21):

: 499, 769, 787, 859, 877, 967 (...).

Note:

It can easily be seen that for some values of odd integers m were obtained much more primes with the sum of the digits equal to m + 1 than for other values of m; for instance were obtained, from the first hundred of primes having the sum of digits equal to an even number, 20 such primes for which m = 9, 21 such primes for which m = 13, 19 such primes for which m = 15, but no such primes at all for which m = 5, m = 11 or m = 17.