

Primes obtained concatenating four consecutive numbers, the largest one being a Poulet number

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Abstract. In this paper I conjecture that there exist an infinity of primes obtained concatenating four consecutive numbers, the largest one from them being a Poulet number. For example, 1726172717281729 is such a prime, obtained concatenating the numbers 1726, 1727, 1728 and 1729, where 1729 is a Poulet number (see the sequence A030471 in OEIS for primes which are concatenation of four consecutive numbers).

Conjecture:

There exist an infinity of primes obtained concatenating four consecutive numbers, the largest one from them being a Poulet number.

Example: 1726172717281729 is such a prime, obtained concatenating the numbers 1726, 1727, 1728 and 1729, where 1729 is a Poulet number.

Note: see the sequence A030471 in OEIS for primes which are concatenation of four consecutive numbers.

The first ten such primes:

: 1726172717281729 (1729 is the 6th Poulet number);
: 2044204520462047 (2047 is the 8th Poulet number);
: 2818281928292821 (2821 is the 11st Poulet number);
: 4678467946804681 (2821 is the 16th Poulet number);
: 8318831983208321 (8321 is the 20th Poulet number);
: 13978139791398013981 (13981 is the 29th Poulet number);
: 15706157071570815709 (15709 is the 31st Poulet number);
: 15838158391584015841 (15841 is the 32nd Poulet number);
: 19948199491995019951 (19951 is the 36th Poulet number);
: 30118301193012030121 (30121 is the 41st Poulet number).