

Info: The code should be as fast and concise as possible. The readability of the code is secondary, but comments are desired.

Challenge 6

It is possible to write ten as the sum of primes in exactly five different ways:

$$7 + 3$$

$$5 + 5$$

$$5 + 3 + 2$$

$$3 + 3 + 2 + 2$$

$$2 + 2 + 2 + 2 + 2$$

What is the first value which can be written as the sum of primes in over five thousand different ways?