

QUIZ 4

COMP9021 PRINCIPLES OF PROGRAMMING

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$ python3
...
>>> from quiz_4 import *
>>> primes_in_window(1, 2, 7)
There is at most one prime in a window of size 1.
In some window, the smallest prime is 2 and the largest one is 2.
In some window, the smallest prime is 3 and the largest one is 3.
In some window, the smallest prime is 5 and the largest one is 5.
In some window, the smallest prime is 7 and the largest one is 7.
>>> primes_in_window(2, 2, 7)
There are at most 2 primes in a window of size 2.
In some window, the smallest prime is 2 and the largest one is 3.
>>> primes_in_window(3, 2, 7)
There are at most 2 primes in a window of size 3.
In some window, the smallest prime is 2 and the largest one is 3.
In some window, the smallest prime is 3 and the largest one is 5.
In some window, the smallest prime is 5 and the largest one is 7.
>>> primes_in_window(4, 2, 7)
There are at most 3 primes in a window of size 4.
In some window, the smallest prime is 2 and the largest one is 5.
>>> primes_in_window(5, 2, 7)
There are at most 3 primes in a window of size 5.
In some window, the smallest prime is 2 and the largest one is 5.
In some window, the smallest prime is 3 and the largest one is 7.
>>> primes_in_window(7, 10, 30)
There are at most 3 primes in a window of size 7.
In some window, the smallest prime is 11 and the largest one is 17.
In some window, the smallest prime is 13 and the largest one is 19.
In some window, the smallest prime is 17 and the largest one is 23.
>>> primes_in_window(1_000, 1_000, 1_000_000)
There are at most 136 primes in a window of size 1000.
In some window, the smallest prime is 1009 and the largest one is 2003.
In some window, the smallest prime is 1013 and the largest one is 2011.
In some window, the smallest prime is 1019 and the largest one is 2017.
In some window, the smallest prime is 1031 and the largest one is 2029.
In some window, the smallest prime is 1423 and the largest one is 2417.
In some window, the smallest prime is 1427 and the largest one is 2423.
>>> primes_in_window(1, 4, 4)
There is no prime in a window of size 1.
```