Exercise 4.5d) Hint

A good way to understand code like this is to pretend that you're Maple, and trace your way through the loop. (You could also try reducing the `100` to, say, `5`, and changing the colon after `end do` to a semicolon.)

We start with old:=2 and new:=3

1. `new-old=1` which is <100, so we go into the loop. We set old:=`new:=`3 and new:=`nextprime(3):=`5.
2. `new-old=5-3=2` which is <100, so we go into the loop. We set old:=`new:=`5 and new:=`nextprime(5):=`7.
3. `new-old=7-5=2` which is <100, so we go into the loop. We set old:=`new:=`7 and new:=`nextprime(7):=`11.
4. `new-old=11-7=4` which is <100, so we go into the loop. We set old:=`new:=`11 and new:=`nextprime(11)=`13.

So each time through the loop, `old` and `new` are consecutive prime numbers. What has to happen for us to stop looping?