

### DOUBLE PRIME NUMBERS (Latvia)

This problem is obviously "*technical*" – you cannot do anything but find all members of the sequences  $a$ ,  $b$  and  $c$ .

Thus, the main questions are how fast it can be done and what the value of  $c_j$  for  $j = 150$  is (because for less  $j$  values, the value of  $c_j$  is less than  $c_{150}$ ) is.

The program has used the fact that the primes greater than 3 can be just in the forms  $6 \times n - 1$  or  $6 \times n + 1$  (where  $n$  is the whole positive number).

For the Pascal users it must be particularly pointed out that the values of  $a$  elements can be stored in *longint* type variable for the given maximum index number  $j$  (150), but the values of  $c$  elements can be stored in two *longint*'s. There is no need for a wide long number arithmetic – it is fairly enough to check the remainder of the two-*longint* number division by *longint* number.