Un programme à mots plus courts pour connaître la primalité des entiers

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On fournit simplement ici une petite adaptation d'un programme fourni précédemment et tel qu'un nombre est premier si son mot de Christoffel sous une portion d'hyperbole est égal au mot de son successeur.

```
#include <iostream>
#include <stdio.h>

int main(int argc, char* argv[]) {
  int n, i, xcourant, ycourant, xa, xb ;
  float res ;

  for (n = 3 ; n <= 100 ; ++n) {
    printf("%5d == ", n) ;
    xcourant = 1 ; if (n%2 == 0) ycourant = n/2-1 ; else ycourant = n/2 ;
    xa = 0 ; xb = 0 ;
    for (i = n/2+1 ; i <= n-2 ; ++i) {
      res = n-((xcourant + 1) * ycourant) ;
      if (res > 0) {
        if (i > n/2+1) std::cout << "b" ;
          xcourant = xcourant+1 ;
          xa = 0 ; xb = xb+1 ;
      }
      else {
        if (i > n/2+1) std::cout << "a" ;
          ycourant = ycourant-1 ;
          xb = 0 ; xa = xa+1 ;
        }
      }
      std::cout << "\n" ;
    }
}
```

Ci-dessous, les mots calculés par ce programme :

```
 7 == a
 8 == a
 9 == aa
10 == ab
11 == aab
12 == aab
13 == aaba
14 == aaba
15 == aaaba
16 == aabaa
17 == aaabab
18 == aaabab
19 == aaabaab
20 == aaabaab
21 == aaaababa
22 == aaabaaba
23 == aaaabaaba
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 71 == aaaaaaaaaaaabaaaaaabaaabaaababaab
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