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

int main (int argc, char* argv[]) {
  int cible, i, n, n1, i1, i2, i3, pastrouve ;
  int t[200] ;
  float fk ;

  for (i = 1 ; i <= 100 ; i++)
    {
      t[i] = i*(i+1) /2 ;
      std::cout << i << " --> " << t[i] << "\n" ;
    }

  for (cible = 3 ; cible <= 100 ; cible = cible+1) {
    fk = (float) cible ;
    n = floor ((sqrt (8.0 * fk + 1.0) - 1.0) / 2.0) ;
    n1 = n * (n + 1.0) / 2.0 ;

    pastrouve = true ;
    i1 = n1 ;
    while ((i1 >= 1) && pastrouve)
      {
      i2 = i1 ;
      while ((i2 >= 1) && pastrouve)
        {
          if (t[i1] == cible) {
            std::cout << "\n" << cible << "=" ;
            std::cout << t[i1] ;
            pastrouve = false ;
          }
          else if (t[i2] + t[i1] == cible) {
            std::cout << "\n" << cible << "=" ;
            std::cout << t[i1] << "+" << t[i2] ;
            pastrouve = false ;
          }
          else if (t[i2] + t[i1] < cible)
            {
            i3 = i2 ;
            while ((i3 >= 1) && pastrouve) {
              if (t[i1] + t[i2] + t[i3] == cible) {
                std::cout << "\n" << cible << "=" ;
                std::cout << t[i1] << "+" << t[i2] << "+" << t[i3] << "\n" ;
                std::cout << i1 << "+" << i2 << "+" << i3 << "\n" ;
                pastrouve = false ;
              }
              i3=i3-1 ;
            }
            }
          i2=i2-1 ;
        }
      i1=i1-1 ;
      }
  }
}
```