**Euler Project Problem 336 Homework**

In class, we wrote a program to efficiently solve Euler Project problem 336. In that program, we began with the train sequence {0,1,2,3,…}, and used

swap(v[0],v[1]); //Skip these non-maximixes

to fast forward to the train sequence {1,0,2,3,…} because any sequence beginning with 0 cannot be a maximix sequence.

1. No sequence beginning with 1 can be a maximix because {1 .. 0x..y} 🡪 {1.. y..x0} 🡪 {0x..y..1}, leaving 1 in the last slot. Modify the code to fast forward to the first sequence not having 1 in the initial slot.
2. Once you do the previous exercise, you will find that the first sequence not having either 0 or 1 in the initial slot cannot be a maximix sequence either. Explain why.
3. What is the first sequence that is not covered by your answer to the previous solution?

Submit your source code, with the explanation in exercise 2 and the sequence of exercise 3 as a comment in that code.