Problem C. Permute

Input file:	*standard input*
Output file:	*standard output*
Time limit:	1 second
Memory limit:	256 mebibytes

Given a decimal integer s, you need to permute the digits of s to obtain a number divisible by 7, or determine that it is impossible.

Leading zeroes in decimal integers are allowed in this problem.

Input

The first line contains an integer T, the number of test cases ($1 \le T \le 10^5$). The descriptions of test cases follow.

A test case contains exactly one line with ten integers $c_0, c_1 \ldots c_9$, where c_i is the number of digits i in s ($0 \le c_i \le 10^9$, $\sum c_i > 0$).

Output

For each test case, if it is possible, print the permuted number formatted according to the rules below. Otherwise, print -1.

Because the number s can be very large, you have to print the permuted number in segments, from left to right. First, print a line containing an integer k, the number of segments ($1 \le k \le 100$). Then print k more lines, the i-th of which will contain two integers r_i and x_i, indicating that the i-th segment of digits in the permuted number consists of r_i repetitions of the digit x_i ($r_i \ge 0$, $0 \le x_i \le 9$).

It can be shown that, if an answer exists, then there also exists an answer which can be represented under the above constraints. If there are several possible solutions, print any one of them.

Example

standard input	standard output
3	2
0 1 0 0 1 0 0 0 0 0	1 1
0 2 0 0 0 0 1 0 0 1	1 4
0 1000000000 0 0 0 0 0 0 0 0	3
	2 1
	1 6
	1 9
	-1