CSE 101 - IP
Tutorial 7

Q1. Define a function is_even_odd(N,K,l) that takes three arguments N of integer type,K of integer type and l (a list of integers). Given list consisting of N integers, you have to do the following operation K times.

a. Find out the sum of all the elements in the list. Denote it by S. Insert an integer in the list strictly greater than S. Hence, size of the list will increase by one.
b. Thus, at the end of the K operations, the array will have N + K elements. Find out the smallest possible value of the last number inserted in the array. Since this number can be very large, you just have to tell whether it will be odd or even.

Sample:
is_even_odd(2,3,[5,7]) returns even

Source(https://www.codechef.com/problems/UTMOPR)

Q2. Define a function, get_special_numbers(a,b,c,d) that returns list of all numbers between the range *c* and *d* (both included)which are divisible by *a* but are not multiple of *b*. Assume d>c

Sample:
get_special_numbers(3,5,100,150) returns [102, 108, 111, 114, 117, 123, 126, 129, 132, 138, 141, 144, 147]

Other interesting problems (Optional for Self-Study):

1. https://www.hackerrank.com/challenges/alternating-characters/problem
2. https://www.hackerrank.com/contests/nov13/challenges/bday-gift