1. Let's say that you have 25 horses, and you want to pick the fastest 3 horses out of those 25. In each race, only 5 horses can run at the same time because there are only 5 tracks. What is the minimum number of races required to find the 3 fastest horses without using a stopwatch?

2. Find equilibrium index in an array. An index is equilibrium, where sum of right side elements is equal to sum of left side elements.

Ex: A={-7,1,5,2,-4,3,0}

Here '3' is equilibrium index since A[0]+A[1]+A[2] = A[4]+A[5]+A[6].

3. calculate the minimum number of platforms required for a railway station so that no train waits. Given arrival and departure of all trains (in 24Hr format) in separate arrays.

Ex: arr[] = {9.00, 9.40, 9.50, 11.00, 15.00, 18.00}

dep[] = {9:10, 12.00, 11.20, 11.30, 19.00, 20.00}

for the given arrival and departure timings we need 3 platforms

4. Find the number which occurs odd number of time in an array. All numbers in array occur even number of times except one number.

Ex: A={1,2,2,3,4,5,4,1,5}

Here 3 occurs odd number of time.