Techniques:

Array:

1. XOR.

K smallest elements – Quickselect

Subarray sum question hashing and cumulative

Windows based solutions in subarray problems

Whenever we want to store a series of characters, numbers and then compare it with other numbers, we can use trie data structure.

Array techniques: left array right array, stack use, self-indexing, %k, sorting, merge sorting, storing in heap/self-balancing bst, hashing.

If hashing is not allowed, use balanced BST.

Always think of balanced BST, sorting, merge-sort (divide and conquer) when no idea.

We need to find pair in sorted array whose sum = a given sum. For this we can take two iterators to start position of both arrays and move them forward according to which array’s element is smaller unless the sum is equal to the required sum.

If graph question regarding length of longest shortest, think of topological at least.