Day 4

1. In the Binary Search algorithm, it is suggested to calculate the mid as beg + (end - beg) / 2 instead of (beg + end) / 2. Why is it so?

Sol. Beg+end can cause overflow in the program. So, it is suggested to use beg+(end-beg).

1. Write the algorithm/function for Ternary Search.

Sol.

**Steps to perform Ternary Search:**

1. First, we compare the key with the element at mid1. If found equal, we return mid1.
2. If not, then we compare the key with the element at mid2. If found equal, we return mid2.
3. If not, then we check whether the key is less than the element at mid1. If yes, then recur to the first part.
4. If not, then we check whether the key is greater than the element at mid2. If yes, then recur to the third part.
5. If not, then we recur to the second (middle) part.