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?

If the array size is bigger, then beg+end can overflow(go beyond int range if the data type is int) and go to some negative values which can’t be indexed by array. When we use end – beg value is within the int range