**Question 1**

In the Binary Search algorithm, it is suggested to calculate the mid as beg + (end - beg) / 2 instead of (beg + end) / 2. This is because the second formula fails to calculate the lower mid correctly. Lower mid can be calculated correctly by using the formula beg+(end-beg)/2.

**Question 2**

Begin

if start <= end then

midFirst := start + (end - start) /3

midSecond := midFirst + (end - start) / 3

if array[midFirst] = key then

return midFirst

if array[midSecond] = key then

return midSecond

if key < array[midFirst] then

call ternarySearch(array, start, midFirst-1, key)

if key > array[midSecond] then

call ternarySearch(array, midFirst+1, end, key)

else

call ternarySearch(array, midFirst+1, midSecond-1, key)

else

return invalid location

End