Problem 2: Binary Search Tree:

* Steps:

1-Read the ratio from the user.

2-Read the first number from the user.

3-If the number equal (-1) the program will print (only few repetitions) and current ratio and terminate the program

4-Add this number in binary search tree by call add methad.

5-if this number is equal anther number in the tree this number didn't add.

6-calculate the ratio by divide the number of digits by the number of node in the tree.if this ratio equal or more than the ratio that user input we will print( many repetitions )and ratio and terminate the program .else we will read anther number from user and repeat form step 2 to step 6.

Note:

We calculate number of node in the tree(non- repeated numbers) by size method .

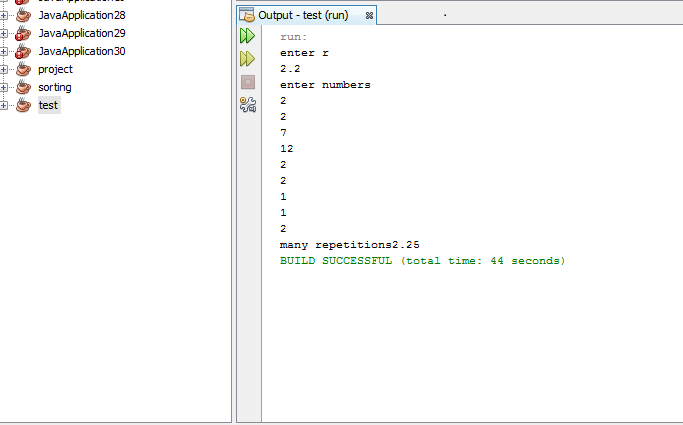
* Time complexity and memory space:

asum thet N equal number of numbers.

1-time complexity :O(Nlog(N))

2- time space :O(N)

* Sample Runs:

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