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3. Maximum Median

Given
1. Two arrays of *n* integers each, *lower_bound[i]* and *upper_bound[i],* where *n* is an odd integer and
2. An integer *max_sum,*
generate an array *arr* such that *lower_bound[i]* ≤ *arr[i]* ≤ *upper_bound[i]* and the sum of elements of the array *arr* does not exceed *max_sum.*
Note: lower_bound, upper_bound arrays may not be sorted.

Find the maximum possible median of an array that can be generated within these conditions.

Note: The median of an array that contains an odd number of integers is defined as its middle element when sorted.
Example
Suppose *n* = 3, *max_sum* = 12 , *lower_bound* = [1, 3, 6], *upper_bound* = [2, 5, 6]

Some of the possible arrays are [1, 3, 6], [2, 4, 6], [1, 5, 6] etc. Return the maximum possible median, 5.

Function Description
Complete the function *getMaxMedian* in the editor below.

getMaxMedian has the following parameters:
int lower_bound[n]: an array of integers
int upper_bound[n]: an array of integers
long int max_sum: the maximum sum allowed

Returns
*int: t*he maximum possible median of the generated array

Constraints

- $1 \le n \le 10^5$, *n* is odd
- $1 \le lower\_bound[i] \le upper\_bound[i] \le 10^9$
- $1 \le max\_sum \le 10^{15}$

▶ **Input Format For Custom Testing**

▼ **Sample Case 0**

Sample Input For Custom Testing