Thời gian còn lại 0:21:12

Câu hỏi 3

Không hoàn thành

Chấm điểm của 2,00

A hotel has m rooms left, there are n people who want to stay in this hotel. You have to distribute the rooms so that as many people as possible will get a room to stay.
However, each person has a desired room size, he/she will accept the room if its size is close enough to the desired room size.
More specifically, if the maximum difference is k, and the desired room size is x, then he or she will accept a room if its size is between x - k and x + k
Determine the maximum number of people who will get a room to stay.

input:
vector<int> rooms: rooms[i] is the size of the ith room
vector<int> people: people[i] the desired room size of the ith person
int k: maximum allowed difference. If the desired room size is x, he or she will accept a room if its size is between x - k and x + k

output:
the maximum number of people who will get a room to stay.

Note: The iostream, vector and algorithm library are already included for you.

Constraints:
1 <= rooms.length, people.length <= 2 * 10^5
0 <= k <= 10^9
1 <= rooms[i], people[i] <= 10^9

Example 1:

Input:
rooms = {57, 45, 80, 65}
people = {30, 60, 75}
k = 5
Output:
2

Explanation:
2 is the maximum amount of people that can stay in this hotel.
There are 3 people and 4 rooms, the first person cannot stay in any room, the second and third person can stay in the first and third room, respectively

Example 2:

Input:
rooms = {59, 5, 65, 15, 42, 81, 58, 96, 50, 1}
people = {18, 59, 71, 65, 97, 83, 80, 68, 92, 67}
k = 1000
Output:
10

For example:

Test	Input	Result

`int peopleCount, roomCount, k;`
`cin >> peopleCount >> roomCount >> k;`
 	
`vector<int> people(peopleCount);`
`vector<int> rooms(roomCount);`
 	
`for(int i = 0; i < peopleCount; i++)`
`  cin >> people[i];`
`for(int i = 0; i < roomCount; i++)`
`  cin >> rooms[i];`
`cout << maxNumberOfPeople(rooms, people, k) << '\n';`
	3 4 5
	30 60 75
	57 45 80 65
		2

`int peopleCount, roomCount, k;`
`cin >> peopleCount >> roomCount >> k;`
 	
`vector<int> people(peopleCount);`
`vector<int> rooms(roomCount);`
 	
`for(int i = 0; i < peopleCount; i++)`
`  cin >> people[i];`
`for(int i = 0; i < roomCount; i++)`
`  cin >> rooms[i];`
`cout << maxNumberOfPeople(rooms, people, k) << '\n';`
	10 10 1000
	18 59 71 65 97 83 80 68 92 67
	59 5 65 15 42 81 58 96 50 1
		10

Answer: (penalty regime: 0 %)

Reset answer

```
int maxNumberOfPeople(vector<int>& rooms, vector<int>& people,

}
```

Precheck Kiểm tra