The difference between two sequences of the same length a_1, a_2, a_3, ..., a_n and b_1, b_2, b_3, ..., b_n can be defined as the sum of absolute differences between their respective elements:

```
diff(a, b) = |a₁ - b₁| + |a₂ - b₂| + ... + |aₙ - bₙ|.
```

For the given sequences `a` and `b` (not necessarily having the same lengths) find a [subsequence](#) `b'` of `b` such that `diff(a, b')` is minimal. Return this difference.

Example

For `a = [1, 2, 6]` and `b = [0, 1, 3, 4, 5]`, the output should be

```
closestSequence2(a, b) = 2.
```

The best *subsequence* will be `b' = [1, 3, 5]` which has a difference of `2` with `a`.

Input/Output

- **[time limit] 4000ms (py3)**

- **[input] array.integer a**

  Constraints:

  3 ≤ a.length ≤ 1000,

  -1000 ≤ a[i] ≤ 1000.

- **[input] array.integer b**

  Constraints:

  a.length ≤ b.length ≤ 1000,

  -1000 ≤ b[i] ≤ 1000.

- **[output] integer**