# 5854. Minimum Difference Between Highest and Lowest of K Scores

My Submissions (/contest/weekly-contest-256/problems/minimum-difference-between-highest-and-lowest-of-k-scores/submissions/)

Back to Contest (/contest/weekly-contest-256/)

You are given a **0-indexed** integer array `nums`, where `nums[i]` represents the score of the $i^{th}$ student. You are also given an integer `k`.

Pick the scores of any `k` students from the array so that the **difference** between the **highest** and the **lowest** of the `k` scores is **minimized**.

Return *the **minimum** possible difference*.

| | |
|---|---|
| User Accepted: | 193 |
| User Tried: | 255 |
| Total Accepted: | 193 |
| Total Submissions: | 262 |
| Difficulty: | Easy |

**Example 1:**

```
Input: nums = [90], k = 1
Output: 0
Explanation: There is one way to pick score(s) of one student:
- [90]. The difference between the highest and lowest score is 90 - 90 = 0.
The minimum possible difference is 0.
```

**Example 2:**

```
Input: nums = [9,4,1,7], k = 2
Output: 2
Explanation: There are six ways to pick score(s) of two students:
- [9,4,1,7]. The difference between the highest and lowest score is 9 - 4 = 5.
- [9,4,1,7]. The difference between the highest and lowest score is 9 - 1 = 8.
- [9,4,1,7]. The difference between the highest and lowest score is 9 - 7 = 2.
- [9,4,1,7]. The difference between the highest and lowest score is 4 - 1 = 3.
- [9,4,1,7]. The difference between the highest and lowest score is 7 - 4 = 3.
- [9,4,1,7]. The difference between the highest and lowest score is 7 - 1 = 6.
The minimum possible difference is 2.
```

**Constraints:**

- `1 <= k <= nums.length <= 1000`
- `0 <= nums[i] <= 10^5`

JavaScript

```javascript
const minimumDifference = (a, k) => {
    a.sort((x, y) => x - y);
    let n = a.length;
    let res = Number.MAX_VALUE;
    for (let i = 0; i <= n - k; i++) res = Math.min(res, a[i + k - 1] - a[i]);
    return res;
};
```

Custom Testcase Use Example Testcases

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Submission Result: Accepted (/submissions/detail/545887342/) More Details (/submissions/detail/545887342/)

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1