

539. Minimum Time Difference

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Description Submissions Solutions

- Total Accepted: 4297
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- Difficulty: Medium
- Contributors: fallcreek

Given a list of 24-hour clock time points in "Hour:Minutes" format, find the minimum **minutes** difference between any two time points in the list.

Example 1:

Input: ["23:59", "00:00"]

Output: 1

Note:

1. The number of time points in the given list is at least 2 and won't exceed 20000.
2. The input time is legal and ranges from 00:00 to 23:59.

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```
class Solution {
public:

    int timeDiff(string t1, string t2) {
        int h1 = stoi(t1.substr(0, 2));
        int m1 = stoi(t1.substr(3, 2));
        int h2 = stoi(t2.substr(0, 2));
        int m2 = stoi(t2.substr(3, 2));
        return (h2 - h1) * 60 + (m2 - m1);
    }

    int findMinDifference(vector<string>& timePoints) {
```

```
int n = timePoints.size();
sort(timePoints.begin(),timePoints.end());
int mindiff = INT_MAX;
for(int i=0;i<n;i++)
{
    int diff = abs(timeDiff(timePoints[(i+n-1)%n],timePoints[i]));
    diff = min(diff,24*60-diff);
    mindiff = min(mindiff,diff);
}

return mindiff;
}
};
```