

Bibi's Residence

Bibi lives in a residence with N houses numbered from 1 to N in a straight line. The i^{th} house has height X_i ($1 \le i \le N$). Bibi wants to know the minimum height difference between 2 houses next to each other. Help Bibi to find it!

Format Input

The first line contains an integer T stating the number of test cases.

For each test case, the first line contains single integer N which indicate the number of houses in Bibi residence. The next line contains N integers X_i $(1 \le i \le N)$ which indicate the height of i^{th} house.

Format Output

Consists of T lines where each line has the format "Case #X: Y", where X is the test case number starting at 1 and Y is the answer to each test case.

Constraints

- $1 \le T \le 10$
- $2 \le N \le 10^3$
- $1 \le X_i \le 2 \times 10^9$

Sample Input (standard input)

```
3
4
1 2 3 4
5
10 2 4 1 5
2
1 10
```

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Sample Output (standard output)

Case #1: 1
Case #2: 2
Case #3: 9



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Bibi tinggal di perumahan yang memiliki N rumah berurutan dari 1 hingga N dalam 1 garis lurus. Rumah ke-i memiliki tinggi X_i ($1 \le i \le N$). Bibi ingin mengetahui perbedaan tinggi minimum antara 2 rumah yang bersebelahan di perumahannya. Bantulah Bibi menghitungnya!

Format Input

Baris pertama berisi sebuah bilangan bulat T yang menyatakan banyaknya kasus uji. Untuk setiap kasus uji, baris pertama berisi sebuah bilangan bulat N yang menyatakan banyak rumah pada perumahan Bibi. Pada baris selanjutnya, terdapat N bilangan bulat X_i $(1 \le i \le N)$ yang menyatakan tinggi rumah ke-i.

Format Output

Terdiri dari T baris yang setiap barisnya memiliki format "Case #X: Y", dimana X adalah nomor kasus uji mulai dari 1 dan Y adalah jawaban untuk setiap kasus uji.

Constraints

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4
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Sample Output (standard output)

Case #1: 1
Case #2: 2
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