**Minimum difference pair**

Submissions: [6031](https://practice.geeksforgeeks.org/problem_submissions.php?pid=606)  Accuracy:

60.6%

   Difficulty: [Basic](https://practice.geeksforgeeks.org/Basic/0/0/)   Marks: 1

[Amazon](https://practice.geeksforgeeks.org/company/Amazon/)

Given an unsorted array, find the minimum difference between any pair in given array.

**Input:**

The first line of input contains an integer T denoting the number of test cases.  
The first line of each test case is N, the size of array. Second line of the test case is the Array.  
  
**Output:**

Print the minimum difference between any two pairs.  
  
**Constraints:**

1 <= T <= 30  
1 < N <= 100  
1 <= arr[i] <= 100000  
  
**Example:  
Input:**  
2  
5  
2 4 5 7 9  
10  
87 32 99 75 56 43 21 10 68 49

**Output:**  
1  
6

\*\* For More Input/Output Examples Use ['Expected Output'](https://practice.geeksforgeeks.org/problems/minimum-difference-pair/0#ExpectOP) option \*\*

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<https://practice.geeksforgeeks.org/problems/minimum-difference-pair/0>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

class Program

{

static void Main()

{

int t = int.Parse(Console.ReadLine().Trim());

while (t-- > 0)

{

int n = int.Parse(Console.ReadLine());

int[] arr = Array.ConvertAll(Console.ReadLine().Trim().Split(' '), e => int.Parse(e));

Array.Sort(arr);

int min\_dif = int.MaxValue;

for (int i = 0; i + 1 < arr.Length; i++)

{

min\_dif = Math.Min(min\_dif, arr[i + 1] - arr[i]);

}

Console.WriteLine(min\_dif);

}

Console.ReadLine();

}

}