Alternate Numbers Difference

Grade settings: Maximum grade: 100
Disable external file upload, paste and drop external content: Yes
Run: Yes **Evaluate**: Yes
Automatic grade: Yes **Maximum execution time**: 32 s

Sheela is crazy on mathematics. Since decided to play a game by using a set of numbers.

The game is to find the difference between the alternate numbers in the set of numbers and find the index position of the smallest number with the largest difference. If more than one pair has the same largest difference consider the first occurrence. If the size of a set is less than 5 and greater than 10, Display "Invalid array size".

Write a java program to implement the above task

Note:

In the Sample Input / Output provided, the highlighted text in bold corresponds to the input given by the user and the remaining text represents the output.

Adhere to the code template, if provided.

Sample Input 1:

Enter the array size

6

Enter the array elements

4

3

2

10

8

6

Sample Output 1:

1

Explanation:

The absolute value of 4-2=2, 3-10=7, 2-8=6, 10-6=4. 7 is the largest value from the difference. Then compare 3 and 10 and find the smallest value. 3 is the smallest value and index position of 3 is 1. So, output is 1

Sample Input 2:

Enter the array size

7

Enter the array elements

7

6

2

2

3

1

8

Sample Output 2:

2

Sample Input 3:

Enter the array size

15

Sample Output 3:

Invalid array size