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## What is the Median?

Find the median value of the series of integers stream through the console. The median

Ex 1,3,6,2,7

the median would be 3

However, we must print the median value when each integer streamed to the console.

EX

1 3 4 60 70 50 2

1 2 3 3 4 27 4

Our approach for this problem is sorting a list each time the number is added to the console to find the median.

```
while numbers in the console
```

```
    add number to list
```

```
    sort list
```

```
    Print median of the sorted list
```

```
}
```

Test Case : 1 2 3 4 5 6 7 8 9 10

should be: 1

1  
2  
2  
3  
3  
4  
4  
5  
5

Test Case: 1 1 1 1 1

1  
1  
1  
1  
1

Problems when submitting

- none

```
import java.util.ArrayList;
import java.util.Collections;
import java.util.Scanner;

public class Main {
    public static void main(String[] args) {

        ArrayList<Integer> list = new ArrayList<Integer>();

        Scanner scan = new Scanner(System.in);

        while(scan.hasNextInt()) {

            int num = scan.nextInt();

            list.add(num);

            Collections.sort(list);

            //even or odd
            if(list.size()%2 == 0) {

                //gets the median of the two index
                int med = ((list.get(list.size()/2) + list.get(list.size()/2-1))
/2);

                System.out.println(med);

            }else {
                System.out.println(list.get(list.size()/2));
            }

        }

    }
}
```