Question 2

You are given a sorted (either in the increasing or in the decreasing order) sequence of numbers, ending with a -1. You can assume that at least two numbers before the ending -1.

Let us call the sequence $x_0 \ x_1 \ ... \ x_n -1$.

You have to output the number of distinct elements in the sorted sequence.

Kindly do not use arrays in the code.

### Sample Test Cases

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 4 4 3 -1</td>
<td>3</td>
</tr>
<tr>
<td>1 2 -1</td>
<td>2</td>
</tr>
<tr>
<td>12 33 87 87 87 87 87 94 112 120 -1</td>
<td>6</td>
</tr>
<tr>
<td>1 2 2 -1</td>
<td>2</td>
</tr>
<tr>
<td>4 5 6 7 -1</td>
<td>4</td>
</tr>
</tbody>
</table>

The due date for submitting this assignment has passed.

As per our records you have not submitted this assignment.

Sample solutions (Provided by instructor)

```c
#include <stdio.h>

int main()
{
    int curr = 0; /* current value being read */
```
```c
int prev;    /* previous value read */
int num_distinct=0; /* number of distinct values read */

prev = curr;
scanf ( "%d", &curr );
num_distinct = 1;

while ( curr != -1 ) {
    prev = curr;
    scanf ( "%d", &curr );
    if ( prev != curr && curr != -1) { 
        num_distinct = num_distinct + 1;
    }
}

printf("%d\n", num_distinct);
return 0;
```