

Problem 1

Write a program reading integers until zero is entered and printing the length of the longest sequence of consecutive numbers of the same value (and this value).

For example, for

```
22 22 22 22 3 3 3 2 -6 -6 -6 0
```

the result should be

```
Longest sequence: 4 times 22
```

for

```
-2 -2 -2 31 31 31 31 31 17 6 6 6 0
```

the result should be

```
Longest sequence: 5 times 31
```

and for

```
-3 2 -3 -3 2 -3 61 61 61 0
```

it should be

```
Longest sequence: 3 times 61
```

Do not use arrays, strings or any other kind of collections.

Problem 2

Write a program which reads in a loop a sequence of integral numbers until the user enters 0, which just signals the end of data and is not then taken into account. After that, the program prints the value of the smallest and the largest element of the sequence and the number of occurrences of these values in the whole sequence.

For example, for the sequence (2, 3, 4, 2, 7, 4, 7, 2), the program should print:

```
Min = 2 3 times
```

```
Max = 7 2 times
```

Note: do *not* use arrays or any other collections!
