# DMPG '17 B4 - Bad Sort

Roger is teaching his CS club how to sort! This algorithm looks like this:

```
function sort(A[0 .. N - 1]):
    pivot <- A[N/2]
    lesser <- []
    equal <- []
    greater <- []
    for each a in A:
        if a < pivot:
            append a to lesser
        if a = pivot:
            append a to equal
        if a > pivot:
             append a to greater
    sort(lesser)
    sort(greater)
    A <- lesser + equal + greater
```

However, you think that Roger is inferior to **Kirito**, and that his sort has a devastating flaw! Can you generate a worst case?

## Input Specification

There is no input.

## Output Specification

Print $1\,024$ integers, each on a newline, representing a worst-case scenario for the sorting algorithm.