





You've seen how software for spreadsheets label their columns, right? They start with, A, B, C... up to X, Y, Z and move on to AA, AB, AC... then BA, BB, BC... until ZZ. Follow AAA, AAB... until ZZZ and so on. Your task is to find out how a given number would be written in this "spreadsheet" form.

Input

From the first line of the input file <code>excel.in</code> the column number is entered. It is a whole positive number with value at most $10^{18}\,$.

Output

In the output file excel.out print the the answer.

Time limit: 0.1 seconds Memory limit: 256 MB

Example

| Input (excel.in) | Output (excel.out) |
|-------------------|--------------------|
| 1 | A |
| 2 | В |
| 26 | Z |
| 27 | AA |
| 676 | YZ |
| 86635700466847208 | WORLDENDSOON |