

## 7705 Letters

We build the infinite sequence of uppercase letters (A..Z) which starts with single-letter strings (A, B, ..., Z), continues with two-letter strings (AA, AB, ..., AZ, BA, BB, ..., BZ, ..., ZZ), then threeletter strings and so on. The same-length strings are ordered lexicographically. We are interested in finding which letter sits at a given index in the sequence.

### Input

The letter index, ranging between 0 and  $2 * 10^9$ .

### Output

The letter at the specified index.

### Sample Input

```
0
25
50
100
250
500
1000
```

### Sample Output

```
A
Z
A
B
E
J
S
```