An integer X is N-cool if it is not bigger than 2\*N and the difference between X and the sum of its digits is equal to N. For given N find the biggest N-cool number or print -1 if it doesn’t exist.

**Input**

The first line of the file **cool.in** contains a single integer N.

**Output**

In the file **cool.out** print the biggest N-cool number or -1.

**Constraints**

**Time limit: 0.1 sec.**

**Memory limit: 256 MB**

**Sample test**

|  |  |
| --- | --- |
| **Input (cool.in)** | **Output (cool.out)** |
| 9 | 18 |