

L	Jamming 8	
	Time Limit (seconds)	1
	Memory Limit (MB)	512

You are the controller of a global digital signal transmission system. The signal is transmitted worldwide as a sequence of digits ranging from **0–9** with length **N**. The transmission follows these rules:

1. If the sequence contains the digit **8** appearing consecutively at least twice, it indicates that there is **interference** in the sequence.
2. A consecutive sequence of 8's longer than 2 is called a **checking block**.
3. An **interference block** is a sequence of digits that excludes any checking blocks. For example, for the sequence **128834567888**, it must be divided into two parts: **1288** and **34567888**, because the checking block splits the number sequence.
4. Interference digits are those immediately **in front of a checking block**, with the number of interference digits being equal to the length of the checking block. For example, in **1234567888**, the checking block is of length 3 (**888**), so the three digits immediately before it (**567**) is considered interference.
5. Sometimes, the checking block itself becomes interference. This happens when the length of the checking block is **greater** than the number of possible interference digits in front of it. In this case, move digit(s) **8** from the checking block into the interference block until the length of the checking block is less than or equal to the interference block.
 - Example: **12345888888**
 Normally, the interference block should have length 5 (**12345**) and the checking block length 6 (**888888**). Since the checking block is longer, move one 8 into the interference block, resulting in interference block = **123458** and checking block = **88888**. The interference digits are then **23458**.
6. Based on rule 5, if moving 8's from the checking block into the interference block reduces the checking block's length to **less than 2**, then there is **no interference**

INPUT

Digit String with length N and without space when $1 \leq N \leq 10^7$

OUTPUT

All interference digits must be listed from **left to right**. If there are **no interference digits**, output the word “**Normal**” instead

EXAMPLE

Sample Input	Sample Output
123456789	Normal
8	Normal
88	Normal
7235416698	Normal
1234885678889	34567
111111111111111111188888888	11111111
111118111118111118111118	Normal
1111111188888888	11111111
3478888	478
7412883548888	12548
88888888	8888
8188216832484328540864887568864897281080	816456
1882816382448325840684878568864987210880	5610
188288388488588688788988	Normal
1882883884885886887889881088	10