Numbering Obsessively

Aslı - being an obsessive person - wants to number every line of her new notebook. But with all the obsessive numbering needs, Aslı wants every number they have written to have a sum of digits of \( K \).

Aslı can't wrap their head around this and they need your help. Can you tell them how many numbers are there that has at most \( N \) digits and have a sum of digits of \( K \)?

**Input**

Two space-separated numbers \( N \) and \( K \) in one line.

**Batch #1:**
- \( 1 \leq N \leq 5 \)
- \( 0 \leq K \leq 45 \)

**Batch #2:**
- \( 1 \leq N \leq 100 \)
- \( 0 \leq K \leq 900 \)

**Output**

Count of numbers having \( N \) or fewer digits and sum of digits of \( K \). Since this count can be huge, you need to take the modulo \( 10^9 + 7 \) before printing it.

**Examples**

Input:

```
2 4
```

Output:

```
5
```
Output:

10

**Explanation**

**1st Input**
- 4, 13, 22, 31, 40

**2nd Input**
- 3, 12, 21, 30, 102, 111, 120, 201, 210, 300