Problem 3: Missing Number

Over the weekend, Max went to a party with his friends. Amidst the fun, he made a new friend and exchanged numbers. However, the next day, Max realized that he had misplaced the number for his new friend, and only remembered a few details. Max recalls some digits from the original phone number, and remembers that each digit is either the same or smaller than the next digit in the actual number.

Create a program to determine how many phone numbers Max must try to reach his friend. Input consists on a sequence of exactly 10 characters; each character is a digit (`0` to `9`) or a pound symbol (`#`) representing an unknown digit.

Print the number of possible phone numbers, given what Max remembers.

Sample input 1

```
0123456#89
```

Sample output 1

```
3
```

The missing digit can be either `6` or `7` or `8`, thus only possible phone numbers are `0123456689`, `0123456789`, and `0123456889`.

Sample input 2

```
44#56#67#9
```

Sample output 2

```
6
```

The only possible phone numbers are `4445666779`, `4445666789`, `4445666799`, `4455666779`, `4455666789`, and `4455666799`.

Sample input 3

```
3#333###99
```

Sample output 3

```
84
```

The missing first digit must be `3`, however the second set of digits could be `333`, `334`, `335`, ..., `339`, `344`, `345`, ..., `349`, and so on until finally `888`, `889`, `899`, and `999`, for a total of 84 possible choices.