- Given $N \rightarrow N \geq 0$
- count all num here every digit is unique
  - $0 \leq x < 0^N$
    - eg: $N=1 \rightarrow 0 \leq x < 10$
      $N=2 \rightarrow 0 \leq x < 100$

$N=2$

```
0    1    2    3    4    5    6    7    8
00   10
01   ++
02   12
03   13
04   14
05   15
06   16
07   17
08   18
09   19
```

```
10
---
100
101
102
103
104
105
106
107
108
109
```

001050

Good:
- found edge cases with 0 right away
- very methodical approach / mental model - thought through to depth
- Analyzed different ways to store chosen data
- Good discussion of tradeoffs (succes condition)
- Good talking through
- Good at stepping back ~~f~~rther analyze problem
- fast at debugging

Bad:
- I got a little confused with valid number logic