

```
1  /*
2    | DP Digit |
3    Desc: A general framework for DP Digit
4    States would be DP[pos][k][over][under][start] where:
5        - pos: The digit position
6        - k: An arbitrary state related to the problem
7        - over: Whether the current num is guaranteed to be over lower bound
8        - under: Whether the current num is guaranteed to be under lower bound
9        - started: Whether the number has started (not full 0s)
10   Source: KawakiMeido
11   State: Untested lmao
12  */
13
14  int Call_DP(int pos, bool started, bool over, bool under){
15      if (pos == sz){
16          //Do something
17      }
18
19      if (dp[pos][started][over][under] != -1) return dp[pos][started][over]
[under];
20
21
22      for (int i=0; i<10; i++){
23          if (!over && i<digl) continue;
24          if (!under && i>digr) break;
25          //Do something
26      }
27      return dp[pos][started][over][under] = res;
28  }
```