

```
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]
20     [under];
21
22     for (int i=0; i<10; i++){
23         if (!over && i<digr) continue;
24         if (!under && i>digr) break;
25         //Do something
26     }
27     return dp[pos][started][over][under] = res;
28 }
```