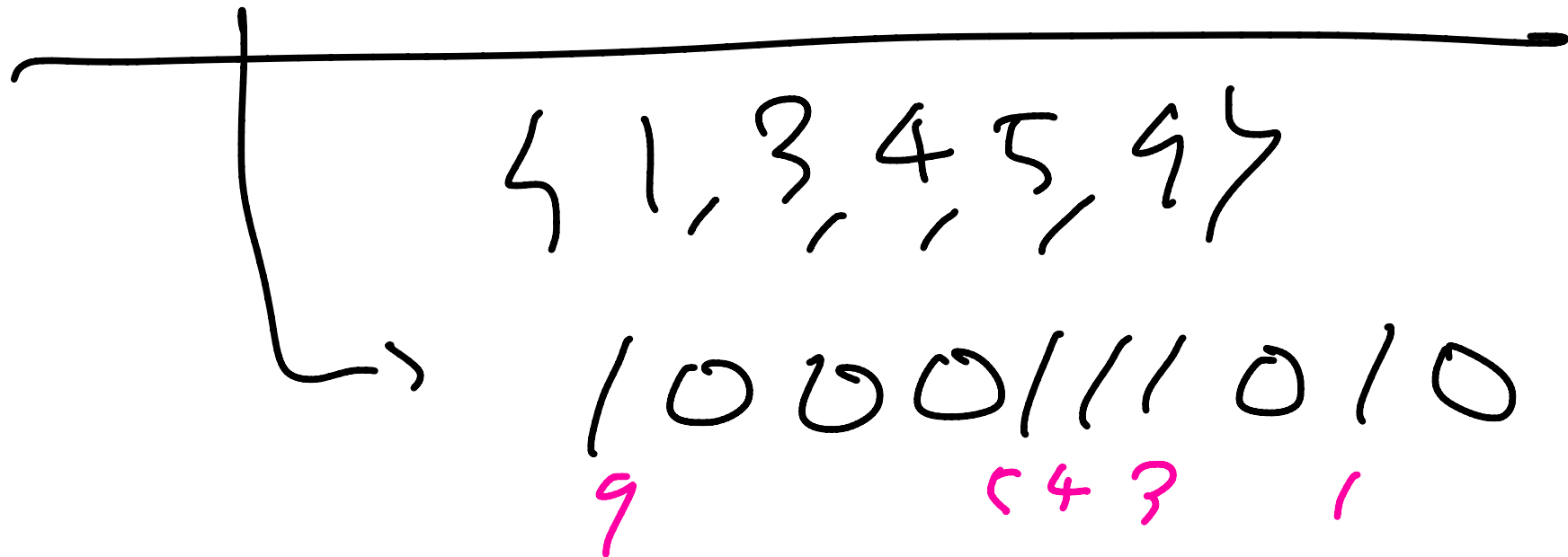


정수로 집합

$$570 = 2^1 + 2^3 + 2^4 + 2^5 + 2^9$$



x^2 증가

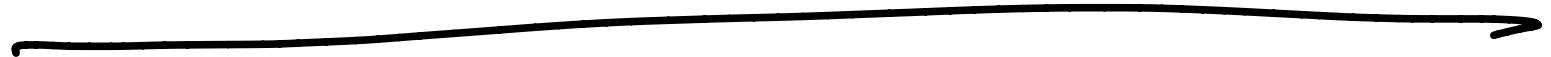
$S \mid (1 < x)$

2^2

1 0 0 0 1 1 1 0 1 0



1 0 0 0 0 0 0 1 0 0



1 0 0 0 1 1 1 1 1 0

1 0 0 0 0 0 1 0 0 0



1 0 0 0 1 1 1 1 1 0

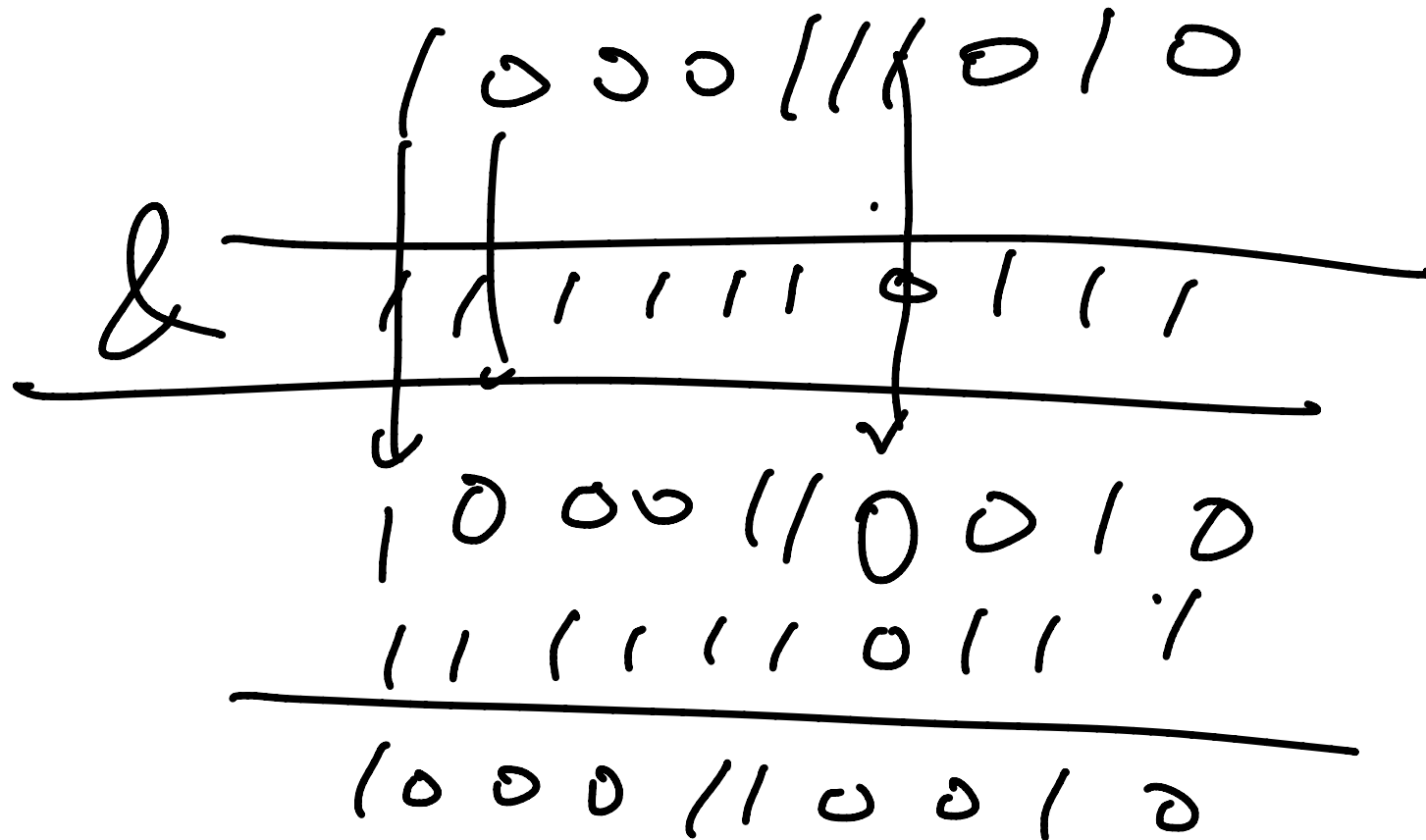
$X_{\frac{2}{2}}^{-1}$

$S \& (< > x)$

$$\begin{array}{r} 1000111010 \\ \& 000000010 \\ \hline 000000010 \end{array}$$

$$\begin{array}{r} 1000111010 \\ \& 000000010 \\ \hline 0 \end{array}$$

X^2 제곱 $S \& \sim (1 \ll X)$



공집합: \emptyset

전체집합: $(1 \leq N)$

추가 $S \cup (1 \leq X)$

제거 $S \setminus \sim(1 \leq X)$

검사 $S \& (1 \leq X)$

토글 $S \wedge (1 \leq X)$

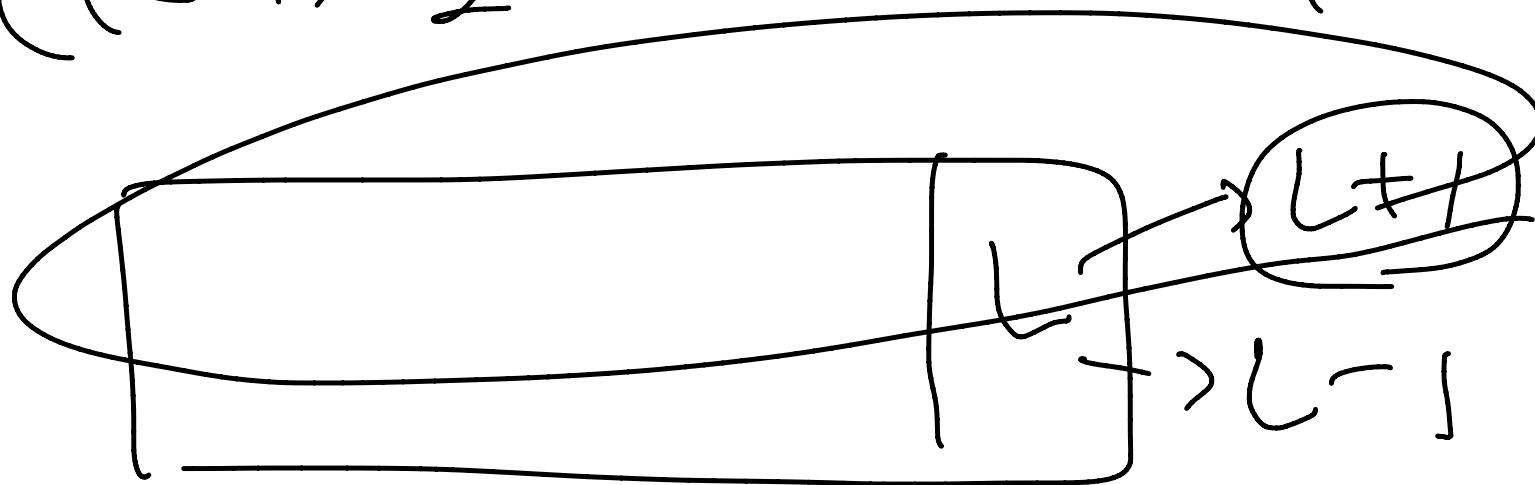
$$D[N][L] = D[N-1][L-1] + D[N-1][L+1]$$

$$D[N][L][S] = \frac{1}{2} (1 - N) \quad \text{마지막 } \frac{1}{2} L$$

등장한 수의 상태 S

$$(l < l+) = 2^x$$

$N+1$



$$D[N+1][L+1][S|2^{L+1}] \neq D[N][L][S]$$

$$D[N+1][L-1][S|2^{L+1}] \neq D[N][L][S]$$

→ $S1(l < (L+1))$
 → $S1(l < (L-1))$

$$D[N][L][S] = D[N-1][L-1][S]$$

$$+ D[N-1][L+1][S]$$

$$+ D[N-1][L-1][S \& \sim (1 \ll L)]$$

$$+ D[N-1][L+1][S \& \sim (1 \ll L)]$$

L_0

처음 사용하는 경우

→ L_0 2번째 사용하는 경우
이름

1, 2, 3, 5

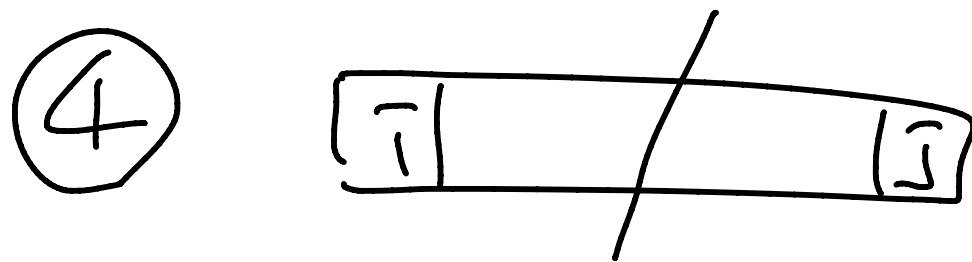
$D[N][L][a][b] =$

길이 $\leq N$
마지막 $\leq L$
동작한 $\leq a \sim b$

① DP?

② $DP[i] = DP[i-1] + ?$ $\frac{N}{2}$
 $DP[i/2] + ?$ $\frac{N}{2}$

③ 2차원 \rightarrow 1차원
시간 $KN^2 \rightarrow KN$ N^3



$$DP[i][j] =$$

$$DP[i][k] + DP[k][j]$$

연속, 224씩 연산

⑤ Bottom-up \Rightarrow Top-Down

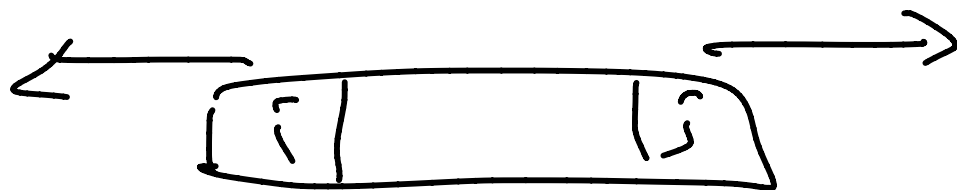
⑥ 상-하 처리함!

3xN

NxM

⑦ 하 처리함!

⑧



중간에서 시작 \leftarrow

\rightarrow

⑨

