c)

$x = 1$

$V = 1 \Rightarrow w = 1 \Rightarrow x \wedge w = 0$

return 0

$x = \begin{matrix} 0 & 1 \\ 1 & 0 \end{matrix}$

$V = 1\,1 \Rightarrow w = 1\,1 \Rightarrow x \wedge w = 1\,0$

return 1

$V = 1\,0 \Rightarrow w = \begin{matrix} 1 & 0 \\ 0 & 1 \end{matrix} \Rightarrow x \wedge w = 1\,1$

$V = 1\,1 \Rightarrow x = 0\,0$

$x =$

$\underbrace{A\,B}\;\underbrace{A\,D} \Rightarrow$

$x \quad w$

$2^8 \cdot 2^8 \cdot 300 = 2^{16} \cdot 300$

$\approx 10^3 \cdot 64 \cdot 300$

$2^8 = 256$

$|U| = \frac{2^8}{8} \approx 2^5 = 32$

1 0 1 0
0 1 0 1

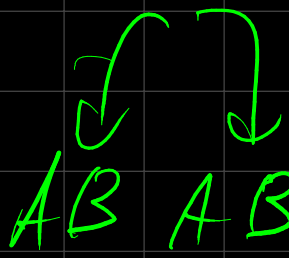
0 1 0 1

1 1 1 1 0 0 0 0

1 0 0 0 0 1 1 1 $\Rightarrow$ 3

1 0 0 0 0 0 0 0

0 1 0 0 0 0 0 0



1 1 1 1
1 0 1 0 → 0 1 | 0 1
1 1 1 1

P[k] 2^k

P[3] = 15 + 16 · 15
= 15 · 17 = $16^2 - 1$
= 255

P[0] = 1 → 0 (1)

P[1] = 11, 10, 11 (3)

P[2] = [1111, 1010, 1111] 1100, [ ], 1000, [ ]
1100, [ ] (15)

$|P[k]| = |P[k-1]| + (|P[k-1]| + 1) \cdot |P[k-1]|$

k

$$X = \underbrace{1100}_{x'}\ \underbrace{1100}_{x''}$$

$$\underbrace{0101}_{x'}\ \underbrace{1110}_{x''}$$

$$f = x' \wedge x''$$

$P[k-1] \Rightarrow s_i$

$$f_{after} = (x' \wedge s_i) \wedge (x'' \wedge s_i)$$

$$= x' \wedge x''.$$

$$S_i = s_i + s_i$$

$$\wedge \quad \wedge$$

$$s_i + \underbrace{0000}_{0}$$

$$0 \; s_i \; 000$$

$$0000 \quad s_i$$