

p

LM1

$$2 \mu s \geq (1-p) \cdot 1 \mu s + p \cdot (0,7 \cdot 20 \mu s + 0,3 \cdot 8 \mu s)$$

$$p \leq 0,00006$$

3 ranki:

112

LRV

10 uterbin

4	5	3	1	4	5	2	4	5	3	1	2
•	•	•	•	•	•	•			•	•	•
4	5	3	1	4	5	2	4	5	3	1	2
	4	5	3	1	4	5	2	4	5	3	1
		4	5	3	1	4	5	2	4	5	3

3 ramlar:

112

FIFO

9 utqolam

4	5	3	1	4	5	2	4	5	3	1	2
•	•	•	•	•	•	•			•	•	
4	5	3	1	4	5	2	2	2	3	1	1
	4	5	3	1	4	5	5	5	2	3	3
		4	5	3	1	4	4	4	5	2	2

3 rānka:

112

OPT

7 uterān

4	5	3	1	4	5	2	4	5	3	1	2
•	•	•	•			•			•	•	
4	4	4	4	4	4	4	4	4	3	3	3
	5	5	5	5	5	5	5	5	5	1	1
		3	1	1	1	2	2	2	2	2	2

4 ramka:

112

LRU

8 uterobin

4	5	3	1	4	5	2	4	5	3	1	2
.
4	5	3	1	4	5	2	4	5	3	1	2
	4	5	3	1	4	5	2	4	5	3	1
		4	5	3	1	4	5	2	4	5	3
			4	5	3	1	4	5	2	4	5

4 rambli:

Anomalia Belady'ego

112

FIFO

10 vteobin

4	5	3	1	4	5	2	4	5	3	1	2
.
4	5	3	1	1	1	2	4	5	3	1	2
	4	5	3	3	3	1	2	4	5	3	1
		4	5	5	5	3	1	2	4	5	3
			4	4	4	5	3	1	2	4	5

4 ranks

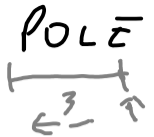
LRU - 8 iterations

143

CLOCK - 9 iterations

1	4	1	2	5	3	1	2	6	4	3	2
•	•		•	•	•	•		•	•		•
>1.	>1.	>1.	>1.	>1.	3.	3.	3.	>3.	3	3.	3
	4.	4.	4.	4.	>4	1.	3.	>3.	3	3.	3
			2.	2.	2	1.	1.	1.	1	1	2.
				5.	5	>2	>2.	2	4.	4.	>4.
						5	5	6.	>6.	>6.	6

3 round:



ROBOI?EE

7 Wodniw

LMY

2 4 3

9 4

4

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2 2 2

4 4

4

4

4

4

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4 4

3 3

3

3

3

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2

2

2

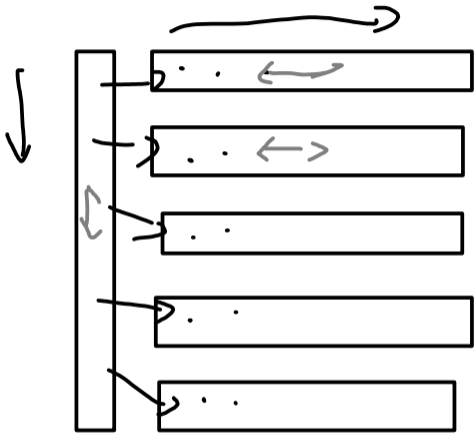
3

2

1

1

1



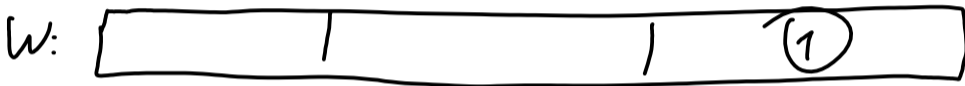
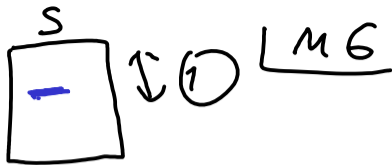
↑ number

MS

a) $O(p)$

b) $O(p^2)$

stworze: $4 \text{ kiB} = 2^{12} \text{ B}$



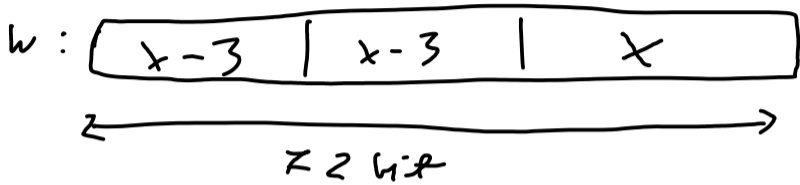
12 bit - w

0x10003

0x20103 X

0x10003

0x21003 ✓



$$2(x-3) + x = 12$$

$$x = 26$$

$$\frac{2^x}{8} = 2^{x-3}$$

$$\lfloor 2^{26} \rfloor$$

