

$7 = 000 \underline{111}$   
 $4 = 000 100$   
 $14 = 001 110$   
 $13 = 001 101$   
 $2 = 000 010$   
 $16 = 010000$   
 $18 = 010010$   
 $9 = 00100 \underline{1}$

I

$\infty$	01	10	11
2	2	3	1

2 4 7 8

0	1	2	3	4	5	6	7
4	16	13	9	14	2	18	7

II

$\infty$	01	10	11
3	2	1	2

~~3~~   ~~8~~   ~~6~~   ~~8~~  
~~2~~   ~~4~~   5   ~~7~~  
~~1~~   3   6

	01	0	1	2	3	4	5	6	7
4	01								
16	00								
13	11	2	16	18	4	7	9	13	14
9	10								
14	11								
2	00								
18	00								
7	01								

III

$\infty$	01	10	11
6	2		

~~6~~   ~~8~~  
~~5~~   ~~7~~  
 1   6

2  
16  
18  
1  
1

0	1	2	3	4	5	6	7
---	---	---	---	---	---	---	---

Masca radix

00 00 11

00 11 00

$\times 2$  06 11

$\times \gg 2$  2 ( $\sim 0 \ll 2$ )

Mergesort

7 4 14 13 | 2 16 18 9

7 4 | 14 13 | 2 16 | 18 9

4 7 | 13 14 | 2 16 | 9 18

4 7 13 14 | 2 9 16 18

2 4 7 9 13 14 16 18

✓

# Sortări Externe

→ sortări pe fișiere

~~quick~~  
~~selection~~  
insertion

I A: 7 4 14 13 2 16 18 9

B: 

7
4

14
13

2
16

18
9

C: 

7
4

14
13

2
16

18
9

II A: 4 7 13 14 2 16 9 18

B:  $\begin{pmatrix} 4 \\ 13 \end{pmatrix} \begin{pmatrix} 7 \\ 14 \end{pmatrix} \begin{pmatrix} 2 \\ 9 \end{pmatrix} \begin{pmatrix} 16 \\ 18 \end{pmatrix}$

C:  $\begin{pmatrix} 4 & 7 \\ 2 & 9 \end{pmatrix} \begin{pmatrix} 13 & 14 \\ 16 & 18 \end{pmatrix}$

A: 4 7 13 14 2 9 16 18

B: 

4	7
2	9

13	14
16	18

A: 2 4 7 9 13 14 16 18

A: 7 4 14 13 2 16 18

B: 

7
4

14
13

2
16

18
----

A: 4 7 13 14 2 16 18

B: 4 7

C:

---

A: 7 4 14 13 2 16 18

B:

$P=1$  C: 

7
4

 14 2 18  
D: 13 16

$P=2$  A: 

4	7
13	14

2	16
18	

$P=3$  C: 

4	7	13	14
2	16	18	

$P=4$  A: 2 4 7 13 14 16 18

3B

Naturală

→ secvență

A: 7 4 14 13 2 16 18

B: 7 13

C: 4 14 2 16 18

A: 4 7 13 14 2 16 18

B: 4 7 13 14

C: 2 16 18

A: →

4B Nat.

A: 7 4 14 13 2 16 18

B: 7 13

C: 4 14 2 16 18

D: 4 7 13 14

A: 2 16 18

B: 2 4 7 13 14 16 18

