

| 75 | 2 | 9 | (11) | 25 | | 72 | 138 |

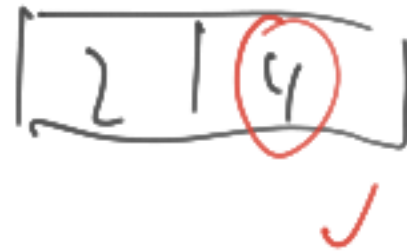
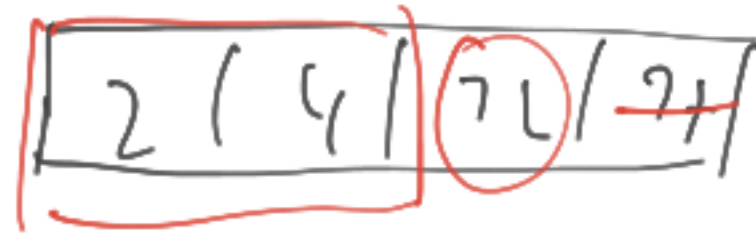
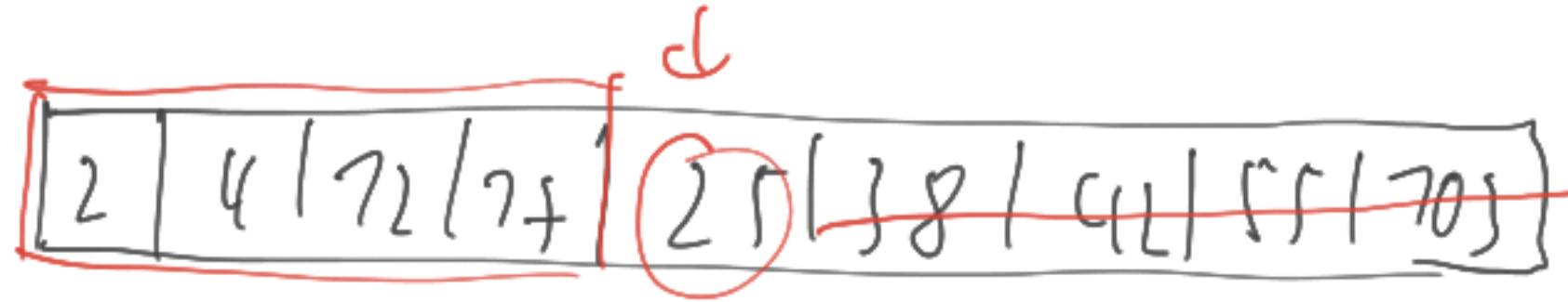
**Bei
Länge
n:**

n Vergleiche

$O(n)$

Laufzeit ist linear in
der Länge der Liste.

**Suche
nach 4**



**Bei
Länge
n**

$\log_2(n)$
Vergleiche im
Worst Case

$O(\log n)$

73 5 2 25 47 70

73

5	73
---	----

2	5	73	25	47
---	---	----	----	----

2	5	70	73	25	47
---	---	----	----	----	----

[73 | 5 | 2 | 25 | 47 | 70]

↪

[5 | 73 | 2 | 25 | 47 | 70]

↪
↪

[2 | 5 | 73 | 25 | 47 | 70]


[2 | 5 | 73 | 25 | 47 | 70]

[2 | 5 | 73 | 25 | 47 | 70]


↪ ↪ ↪

[2 | 5 | 70 | 73 | 25 | 47]


[~~73~~ 5 2 25 47 70]



[2 | 5 73 25 47 70]



[2 5 | 73 25 47 70]



[2 5 70 | 25 47 73]



...

↓
[703 | 4 | 2 | 75 | 74 | 7]

↓
[4 | 703 | 2 | 75 | 74 | 7]

↓
[4 | 2 | 703 | 75 | 74 | 7]

⋮

[4 | 2 | 75 | 74 | 7 | 703]

[(4) | (2) | 7r | 7+ | 7 | ~~7~~ | 703]

[2 | (4) | (7r) | 7+ | 7 | ~~7~~ | 703]

[2 | 4 | (7r) | (7+) | 7 | ~~7~~ | 703]

[2 | 4 | 7r | (7+) | (7) | ~~7~~ | 703]

[(2 | 4) | 7r | (7) | ~~7~~ | 7+ | 703]

[30 75 2 77 23 58 42]

[75 2 23]

Zauberei

[2 75 23]

30

30

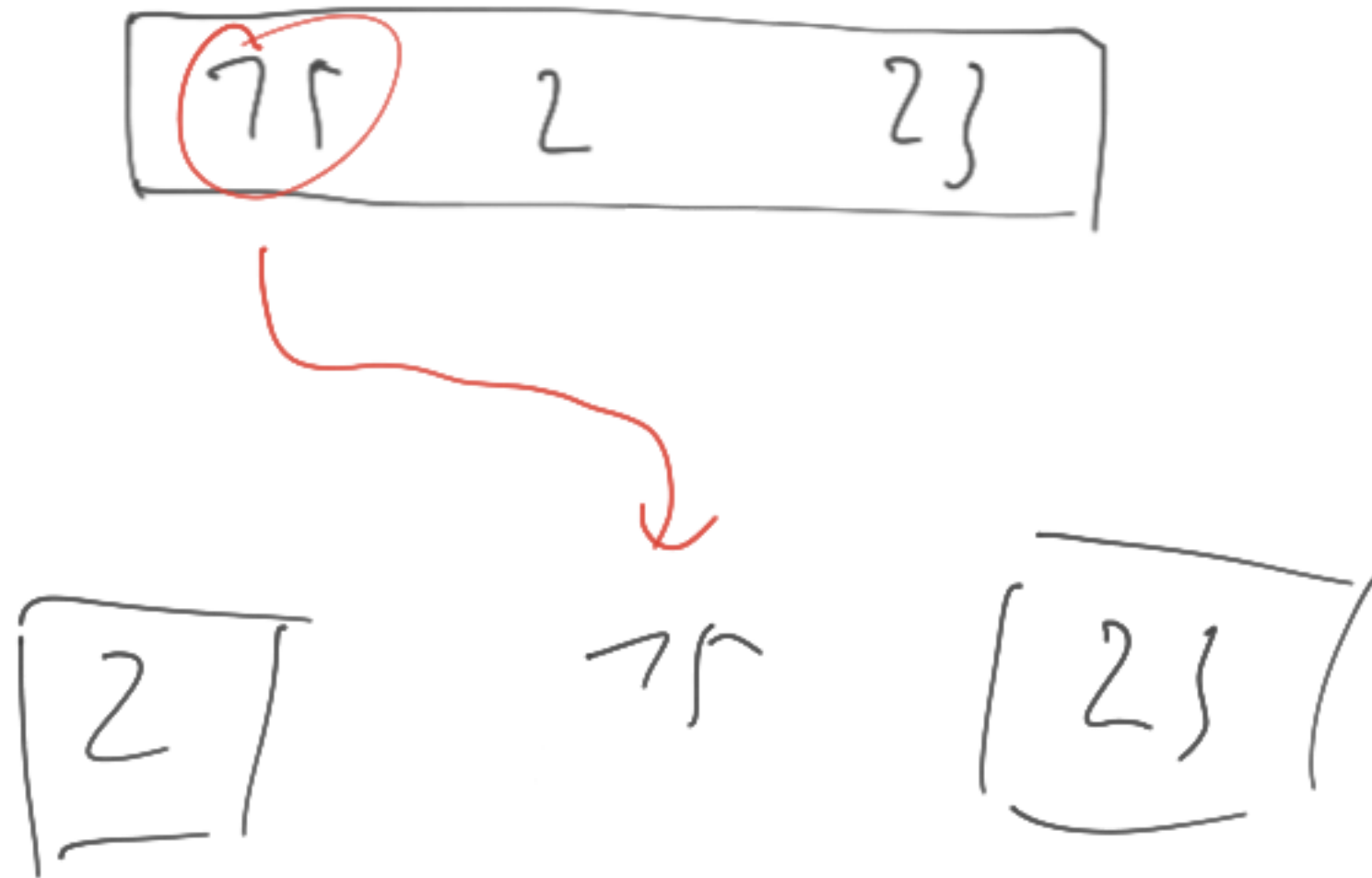
[77 58 42]

[42 58 77]

Zauberei?

Rekursion!

Abbruch, wenn die Teillisten
die Länge 0 oder 1 erreicht
haben.



[73 2 35 7 | 74 5 3 8]

[73 2 | 35 7]

[74 5 | 3 8]

[73 | 2]

[35 | 7]

[74 | 5]

[3 | 8]

[73] [2]

[35] [7]

[74] [5]

[3] [8]

[7] [2]

[5] [7]

[7] [5]

[3] [8]

[2 7]

[7 5]

[5 7]

[3 8]

[7 2 7 5]

↑

...

[3 5 8 7]

↑

