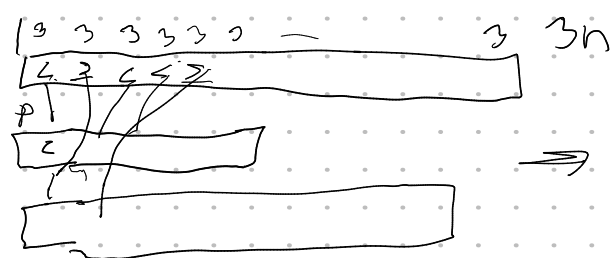
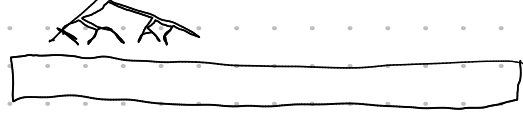
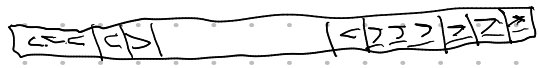
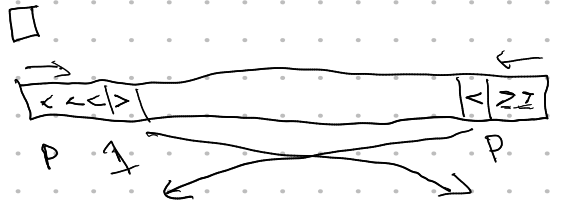
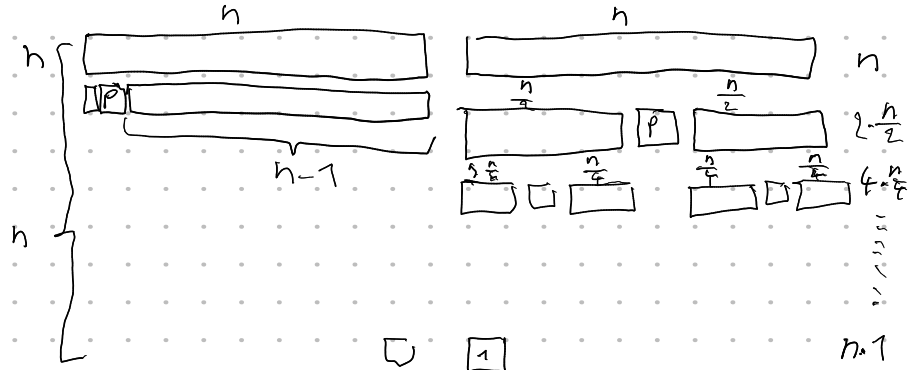
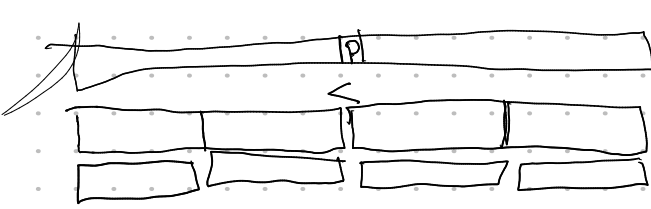


$$n \cdot \log k \cdot \frac{n}{k} \cdot \log \left( \frac{n}{k} \right) =$$

$$n \cdot \log k \cdot \frac{n}{k} \cdot \log n - n \cdot \log k \cdot \frac{n}{k} \cdot \log k$$

$O(n \cdot \log n)$   
MERGE SORT



$$O(n \cdot n) = O(n^2)$$

$$2^{\log n} = n$$

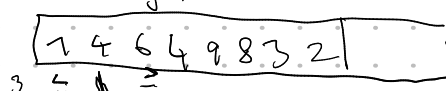
$$O(n \cdot \log(n))$$

$$n, \frac{n}{2}, \frac{n}{4}, \frac{n}{8}, \dots, 1$$

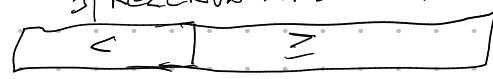
$$\log_2 n$$

$$\frac{n}{2^i} = 1 \quad n = 2^i$$

$$\log n = \log(2^i) = i \cdot \log(2) = i$$



- 1) POROVNÁVÍ
- 2) PŘESUN DO SEZNAMU
- 3) REZERVA NA SPOJENÍ SEZNAMŮ



AMORTIZOVANÁ SLOŽITOST

$$O(3n \cdot \log n) = O(n \cdot \log n)$$