Căutare

perfect echilibrat
$$O(\log_2 n)$$

degenerat în listă
$$O(n)$$

Arbori AVL

$$|h_s - h_d| \leq 1 \qquad h \text{ subarbore stâng}$$
$$\text{drept}$$

Binar, Ordonat, Echilibrat

Echilibrare $\rightarrow$ căutare nod nou
adăugat

$$
\begin{array}{llll}
S & S & \rightarrow & 1S \\
S & \int & \rightarrow & 2S
\end{array}
\qquad
\begin{array}{llll}
\int & \int & \rightarrow & 1\int \\
\int & S & \rightarrow & 2\int
\end{array}
$$

① SS   1 stânga

$x > y > z$

①: rotation trees with nodes x, y, z and leaves 1, 2, 3, 4
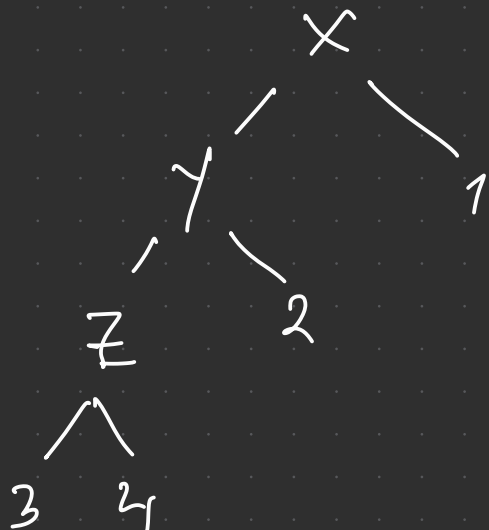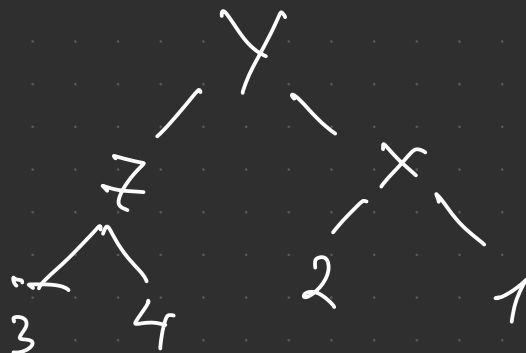
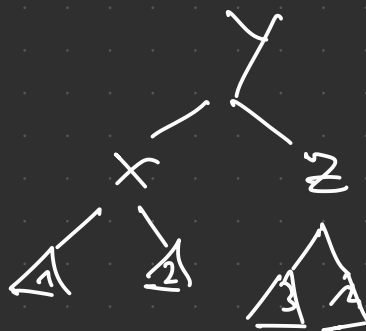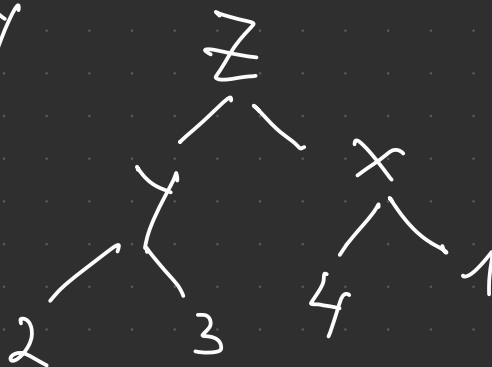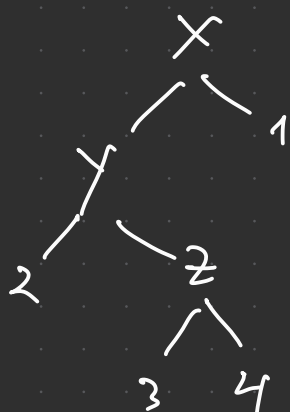② SS   1 dreapta

$x < y < z$

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③ SS   2 stânga

$x > z > y$

(4)   ∆ S   2 dheepta

$$x < z < y$$