

The set $\{s, u, w\}$ was merged into $\{t, v, z\}$.

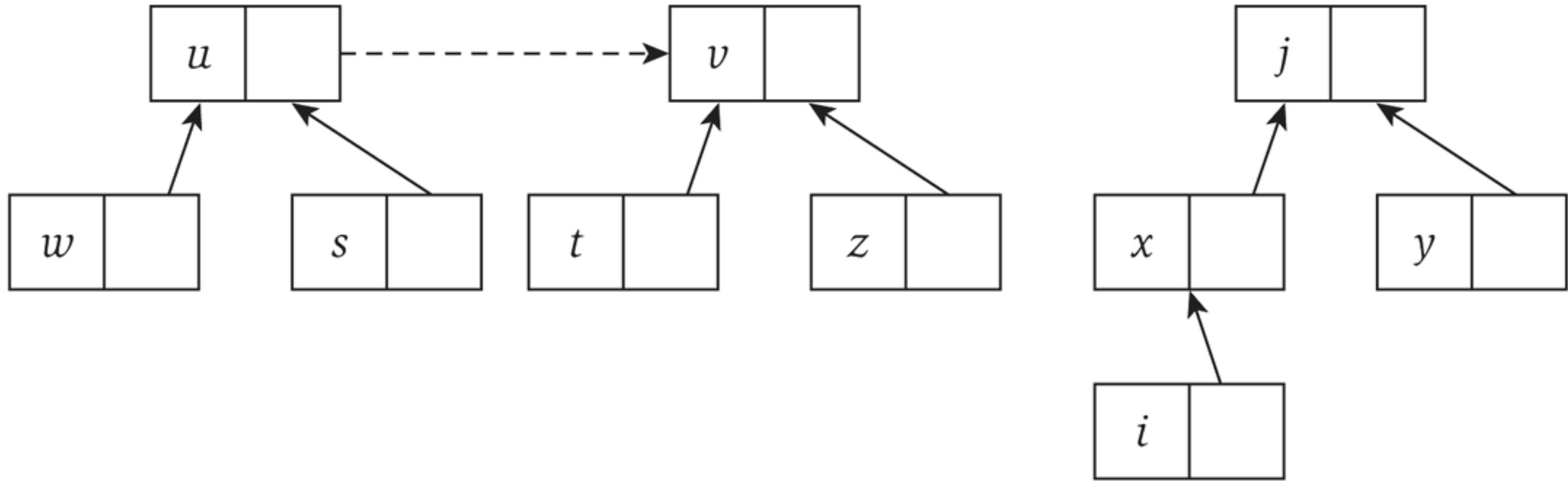


Figure 4.12 A Union-Find data structure using pointers. The data structure has only two sets at the moment, named after nodes v and j . The dashed arrow from u to v is the result of the last Union operation. To answer a Find query, we follow the arrows until we get to a node that has no outgoing arrow. For example, answering the query $\text{Find}(i)$ would involve following the arrows i to x , and then x to j .