

The diagram illustrates a hierarchy of tree structures corresponding to different partitions of the set $\{1, 2, 3, 4\}$. Each tree is rooted at a node labeled with a partition code. The nodes are labeled with numbers 1 through 4 in blue. The trees are organized as follows:

- Row 1:** Five trees with codes: $-1-234-4-5$, $3124-4-5$, $-1-3-24-4-5$, $-1-234-4-5$, and $-1-22456$.
- Row 2:** Five trees with codes: $-14-4-32-5$, $-14-423-5$, $324W(123456)$, $-1234-4-5$, $-1-3-2456$, $145KP(-1234-4-5)$, $-1-23456$, $324W(123456)$, $345KP(-1-3-2456)$, and $274KP(-1-23456)$.
- Row 3:** Ten trees with codes: $324KP(-1-234-4-5)$, $34-432-5$, $-14-4-3-2-5$, $324KP(-1-3-24-4-5)$, $4-4323-5$, $445KP(-14-4-3-2-5)$, $1234-4-5$, -123456 , $145KP(123456)$, $174KP(1234-4-5)$, $174KP(-123456)$, $345KP(-123456)$, $274KP(123456)$, and $245KP(-1-23456)$.
- Row 4:** Twenty trees with codes: $324KP(-1234-4-5)$, $174KP(-123456)$, $345-3-2-14$, $445KP(-1234-4-5)$, $324KP(-1234-4-5)$, $374KP(-1-3-2456)$, $45-3-2-14$, $445KP(-1234-4-5)$, $5-WIN(123456)$, $6-WIN(123456)$, $12-WIN(123456)$, $14-WIN(123456)$, $18-WIN(123456)$, $21-WIN(123456)$, $24-WIN(123456)$, and $26-WIN(123456)$.
- Row 5:** Eight trees with codes: $324KP(-1234-4-5)$, $374KP(-123456)$, $345KP(-123456)$, $-5-4-3-2-14$, $445KP(1234-4-5)$, $445KP(-123456)$, $324KP(1234-4-5)$, and $374KP(-123456)$.
- Row 6:** Sixteen vertical lines with codes: $445KP(1234-4-5)$, $374KP(-123456)$, $345KP(-123456)$, $-5-4-3-2-14$, $445KP(1234-4-5)$, $445KP(-123456)$, $324KP(1234-4-5)$, $374KP(-123456)$, $445KP(1234-4-5)$, $374KP(-123456)$, $445KP(1234-4-5)$, $374KP(-123456)$, $445KP(1234-4-5)$, $374KP(-123456)$, $445KP(1234-4-5)$, and $374KP(-123456)$.
- Bottom Row:** Sixteen labels: $34-WIN(123456)$, $36-WIN(123456)$, $38-WIN(123456)$, $40-WIN(123456)$, $42-WIN(123456)$, $44-WIN(123456)$, $46-WIN(123456)$, $48-WIN(123456)$, $50-WIN(123456)$, $52-WIN(123456)$, $54-WIN(123456)$, $56-WIN(123456)$, $58-WIN(123456)$, $60-WIN(123456)$, $62-WIN(123456)$, and $64-WIN(123456)$.