

Competitors: 14



The diagram illustrates the construction of a Huffman tree for the Estonian alphabet. The tree is built from the bottom up, merging pairs of characters or sub-trees based on their frequency. The nodes are labeled with their frequency and the range of binary codes they represent.

- Left Branch:**
 - Node 13:** Merges **SINIMÄE** and **URVIK** (frequency 13, range 000 - 100).
 - Node 14:** Merges **OOLMETS** and **SHENGELIA** (frequency 14, range 000s1 - 010).
- Middle Branch:**
 - Node 15:** Merges **KANGILASKI** and **LEPP** (frequency 15, range 000 - 100).
- Bottom Branch:**
 - Node 16:** Merges **NIIT** and **BARDIZH** (frequency 16, range 100 - 001).
- Final Merges:**
 - Node 19:** Merges the left branch (Node 13) and the middle branch (Node 15).
 - Node 20:** Merges the bottom branch (Node 16) and the middle branch (Node 15).
 - Node 21:** Merges the middle branch (Node 15) and the bottom branch (Node 16).
 - Node 22:** The root node, merging the middle branch (Node 15) and the bottom branch (Node 16).

The final output of the tree is **SHENGELIA** (011 - 001).