

Attendance Quiz for July 16, 2012 [Combinatorics Special Lecture]

1. Apply the Joyal bijection that inputs sequences in $\{1, \dots, n\}^n$ and outputs a **doubly rooted** labeled tree on $\{1, \dots, n\}$. To the following sequence (with $n = 9$)

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Indicate clearly ROOT A and ROOT B. Draw the output, but also write it as a set of edges.

2. Apply the Reverse Joyal bijection that inputs a **doubly rooted** labeled tree on $\{1, \dots, n\}$ and outputs a sequence in $\{1, \dots, n\}^n$, with $n = 9$.

Set of Edges of the tree: $\{13, 18, 19, 25, 34, 35, 36, 57\}$ Root $A = 1$, Root $B = 2$.

Ans.: