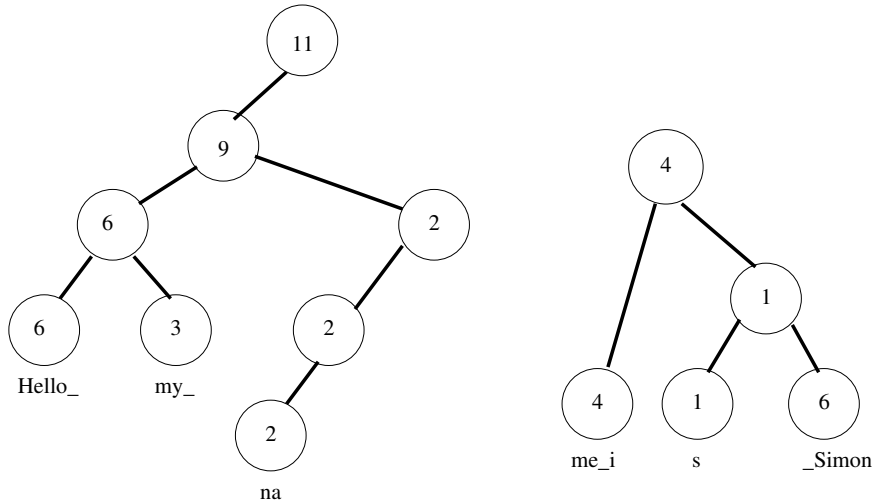


# CSCI-1200 Data Structures — Spring 2020

## Lecture 17 – iClicker split() Solutions

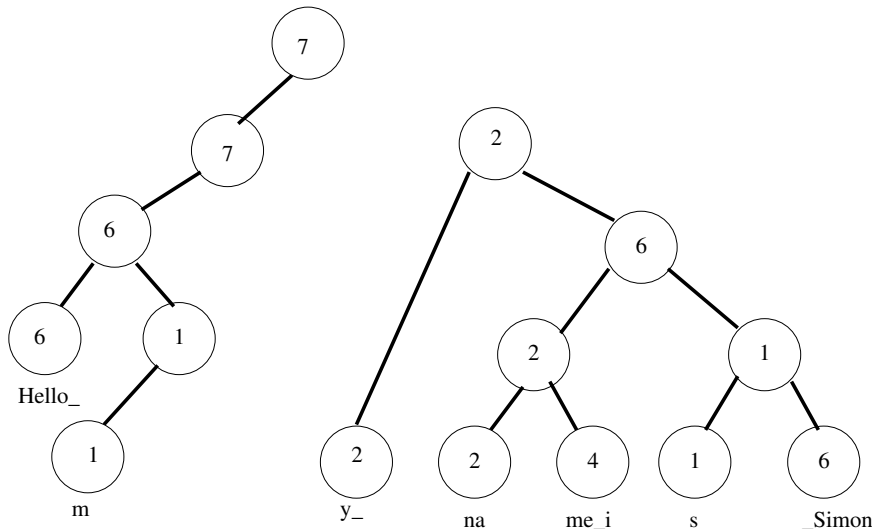
### *lhs.split(11,rhs)*

This was our first example. index 11 is at the start of a node, so nothing special needs to be done. Total node count: 8



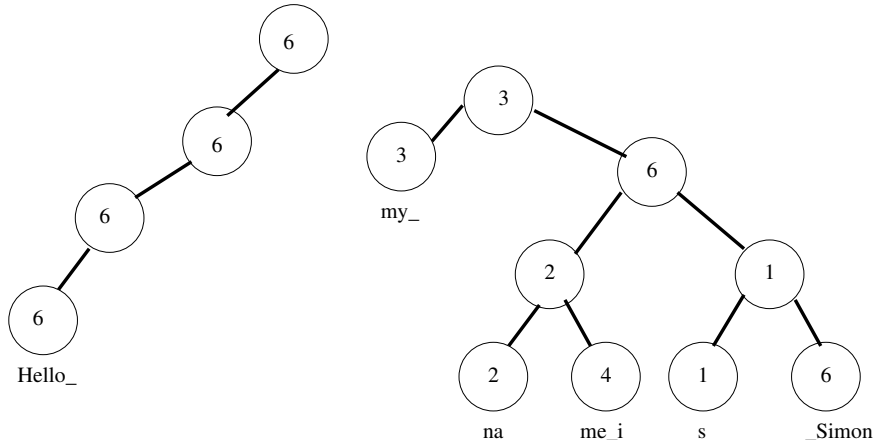
### *lhs.split(7,rhs)*

index 7 is in the middle of a node, so we first have to split “my\_” into “m” and “y\_” (with the old “my\_” node becoming the parent of the two new leaves). Total node count: 6



***lhs.split(6,rhs)***

index 6 is at the start of a node, so nothing special needs to be done. Total node count: 4



***lhs.split(1,rhs)***

index 1 is in the middle of a node, so we first have to split "Hello\_" into "H" and "ello\_". Total node count: 5

On the right hand side, we have severed three nodes, "ello\_", "my\_", and the weight 6 node at the top of the subtree that contains "na|me\_i|s|\_Simon". So we join these going left to right.

