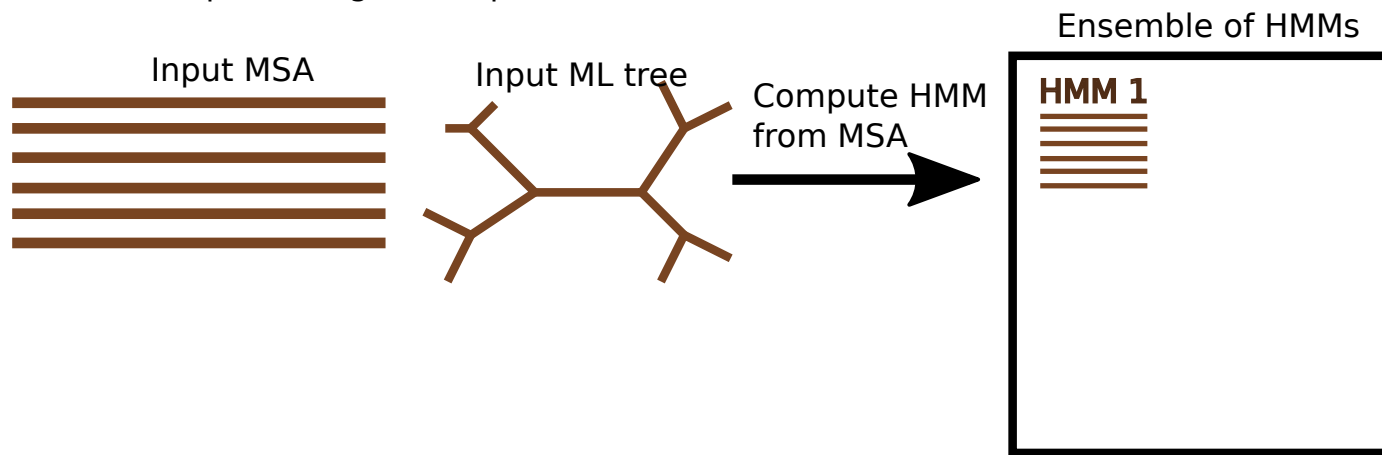
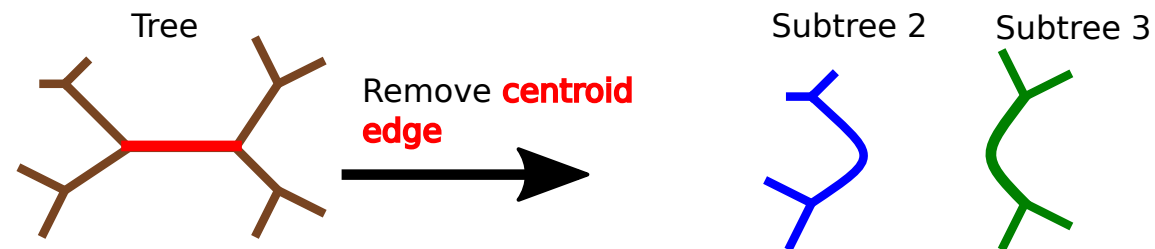


Generating ensemble of HMMs

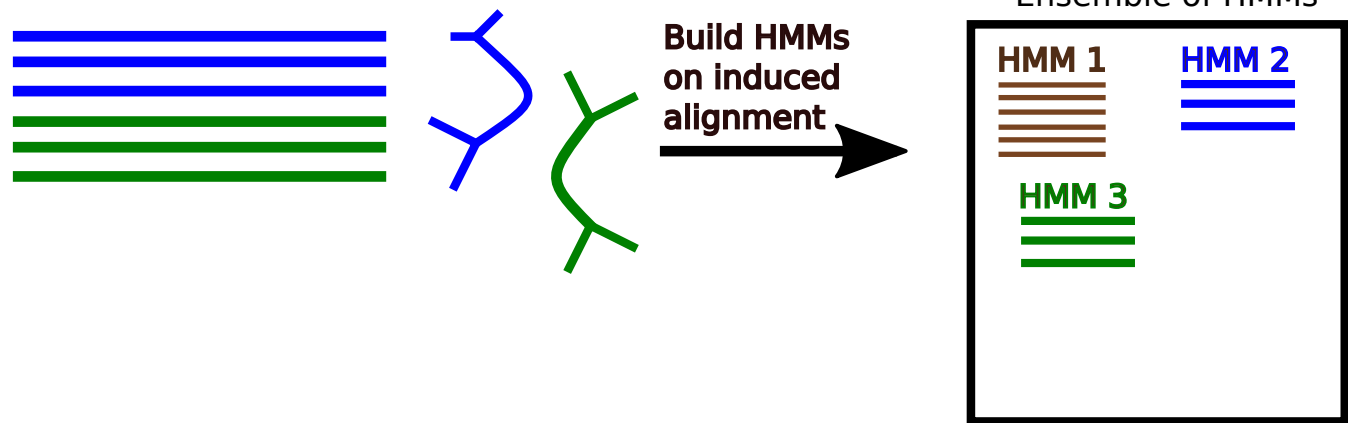
1) Input is MSA and ML tree estimated from MSA. Build HMM on entire MSA and add it to the ensemble. If the MSA has more than 10 sequences, go to step 2.



2) Partition the tree into approximately two equally sized subtrees by removing the **centroid edge**.



3) Find alignments induced by each subtree and add HMMs built from the induced alignments to the ensemble of HMMs.



4) Repeat step 2 and 3 on each subtree with more than 10 leaves. Once all subtrees have less than 10 leaves, terminate and return the ensemble of HMMs.

