We characterize which lists can be realized as the degrees for multigraphs in several different families with underlying treelike structure. These provide nice examples for possible extended exercises in graph theory classes. Examples include multigraphs with underlying graph a tree or forest as well as observing that all multigraphs can be realized with at most one underlying cycle. We also characterize degree lists for trees, forests and graphs with at most one cycle when at most 2 parallel edges are allowed. (Received September 17, 2013)