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Christopher Poulin Alfeld* (alfeld@math.wisc.edu), Department of Mathematics, University of Wisconsin-Madison, 480 Lincoln Dr., Madison, WI 53706-1388. Non-Branching (and Branching) degrees in the Medvedev Lattice of Π_1^0 classes.

A Π_1^0 class is the set of infinite paths through a computable tree. Say that $P \ge_M Q$ if there is a computable function f which maps P into Q. The Medvedev lattice of Π_1^0 classes is the lattice of degrees induced by this reduction. I will provide background and give characterizations and results about non-branching degrees in this lattice. In particular, I will show three distinct classes of non-branching degrees. Lastly, I will briefly discuss a similar classification for branching degrees. (Received August 22, 2006)