A $\Pi^0_1$ class is the set of infinite paths through a computable tree. Say that $P \geq_M Q$ if there is a computable function $f$ which maps $P$ into $Q$. The Medvedev lattice of $\Pi^0_1$ 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)