1016-03-32   **Antonio Montalban*** (`antonio@math.uchicago.edu`), Department of Mathematics, 5734 S. University ave., University of Chicago, Chicago, IL 60637. *Computable linearizations of well-partial-orderings.*

We analyze results on well-partial-orderings from the viewpoint of computability theory, and we answer two questions posed by Diana Schmidt. We obtain the following results. De Jongh and Parikh showed that every well-partial-order has a linearization of maximal order type. We show that such a linearization can be found computably. We also show that the process of finding such a linearization is not computably uniform, not even hyperarithmetically. A similar behavior occurs with minimal linearizations. Schimdt also asked whether there was any relationship between the rank (also known as hight) and the maximal order type of a well-partial-ordering. We characterize the pairs of ordinals which can be obtained as rank and maximal order type of a well-partial-ordering. (Received January 11, 2006)