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We consider quasi-hereditary algebras  $A$  which have  $\mathbb{Z}/2$ -gradings. These arise naturally in the representation theory of reductive algebraic groups in positive characteristic. Generally, such gradings are much easier to obtain than a  $\mathbb{Z}^+$ -grading. However, in many respects, a  $\mathbb{Z}/2$ -grading can be almost as good for purposes such as calculating cohomology and characters. We will describe the general theory, and indicate some applications and examples. (Received September 22, 2006)