The goal of this thesis is to determine the asymptotic behaviour of the number of quadratic extensions of a number field in terms of the discriminant. We will be particularly interested in extensions of imaginary quadratic number fields with odd class number. For a given number field $K$ we will define the group of ideles $\mathbb{I}_K$ and the idele class group $C_K$, which capture the local behaviour of a number field. Then we use the Artin reciprocity theorem to give a correspondence of quadratic extensions and quadratic characters on $C_K$. When the class number is odd, quadratic characters on $C_K$ reduce to characters on the product of groups of units of local fields. These characters can be given explicitly and we compute the discriminant of the corresponding extension from their local conductors. We put this information together in the form of a zeta function and finally use a Tauberian theorem to compute the asymptotic behaviour.