

Exercise 2. **Finord** is a skeletal category.

Proof. Let n and m be two objects of **Finord**, and f an isomorphism from n to m . Then f is a bijection between the ordinals n and m . If $n \subset m$, then n is a section of m and such a bijection does not exist. From this we deduce that we must have $n = m$ (as the roles of n and m can be exchanged in the previous sentence). In turn, this means that $f = \mathbf{1}_n = \mathbf{1}_m$, so that **Finord** is skeletal.

□