

## **Definition** (Category **BoundedLat**)

The category **BoundedLat** is defined by:

1. *Objects*: The objects of this category are all bounded lattices.
2. *Morphisms*: The morphisms from a lattice  $X$  to a lattice  $Y$  are the bounded lattice homomorphisms maps from  $X$  to  $Y$ .
3. *Identity morphism*: The identity morphism for the bounded lattice  $X$  is the identity map  $\text{Id}_X$ .
4. *Composition operation*: The composition operation is composition of maps.