Name	Description	Least element ($\perp$)	Merge(a, b)	Morphisms	Monotone functions
`lbool`	Boolean lattice (false → true)	`false`	$a \vee b$	`when_true(&blk)` → `v`	

`lmax`	Max over an ordered domain	$-\infty$	$max(a, b)$	`gt(n)` → `lbool`
				`gt_eq(n)` → `lbool`
				`+(n)` → `lmax`
				`-(n)` → `lmax`	

`lmin`	Min over an ordered domain	∞	$min(a, b)$	`lt(n)` → `lbool`
				`lt_eq(n)` → `lbool`
				`+(n)` → `lmin`
				`-(n)` → `lmin`	

`lset`	Set of values	empty set	$a \cup b$	`intersect(lset)` → `lset`
				`project(&blk)` → `lset`
				`product(lset)` → `lset`
				`contains?(v)` → `lbool`
					`size()` → `lmax`

`lpset`	Set of non-negative numbers	empty set	$a \cup b$	`intersect(lpset)` → `lpset`
				`project(&blk)` → `lpset`
				`product(lpset)` → `lpset`
				`contains?(v)` → `lbool`
					`size()` → `lmax`
					`sum()` → `lmax`

`lbag`	Multiset of values	empty multiset	$a \cup b$	`intersect(lbag)` → `lbag`
				`project(&blk)` → `lbag`
				`multiplicity(v)` → `lmax`
				`contains?(v)` → `lbool`
				`+(lbag)` → `lbag`
					`size()` → `lmax`

`lmap`	Map from keys to lattice values	empty map	see text	`intersect(lmap)` → `lmap`
				`project(&blk)` → `lmap`
				`key_set()` → `lset`
				`at(v)` → `any-lattice`
				`key?(v)` → `lbool`
					`size()` → `lmax`

Table 3: Built-in lattices in Bloom^L. Note that `v` denotes a Ruby value, `n` denotes a number, and `blk` indicates a Ruby code block (anonymous function).