

Signature 1. A *list* is an object.

Signature 2. $[]$ is a list.

Signature 3. Let a be an object and L be a list. $a :: L$ is a list. Let $[a]$ stand for $a :: []$. Let $[a,b]$ stand for $a :: [b]$. Let $[a,b,c]$ stand for $a :: [b,c]$.

Axiom 4. Let L be a list. Then $L = []$ or $L = a :: L'$ for some object a and some list L' .

Axiom 5. Let a be an object and L be a list. Then $L \prec a :: L$.