Phase 4 : Z Notation Basics

Example 1 : Given Types

$[Person, Company]$

Example 2 : Free Types

Status ::= active — inactive — suspended
Answer ::= yes — no

Example 3 : Abbreviations

adult == age $\geq$ 18
positive == x ¿ 0

Example 4 : Axiomatic Definitions

$$
\begin{array}{|l}
\hline
population : Ncapacity : N \\
\hline
population \leq capacitycapacity > 0 \\
\end{array}
$$

Example 5 : Schema Definitions

$$
\begin{array}{|l}
\hline
\text{\textit{Library}} \\
\hline
books : Nmembers : N \\
\hline
books > 0members \geq 0 \\
\hline
\end{array}
$$

$$
\begin{array}{|l}
\hline
\text{\textit{BankAccount}} \\
\hline
balance : Noverdraft : N \\
\hline
balance \geq 0overdraft \geq 0 \\
\hline
\end{array}
$$