

## Phase 4 : Z Notation Basics

### Example 1 : Given Types

$[Person, Company]$

### Example 2 : Free Types

$StatusQ ::= active \mid inactive \mid suspended$

$Answer ::= yesQ \mid no$

### Example 3 : Abbreviations

$MaxCapacity == 100$

$DefaultSize == 10$

### Example 4 : Axiomatic Definitions

$population : \mathbb{N}$ $capacity : \mathbb{N}$
$population \leq capacity$ $capacity > 0$

### Example 5 : Schema Definitions

$Library$ $books : \mathbb{N}$ $members : \mathbb{N}$
$books > 0$ $members \geq 0$

$BankAccount$ $balance : \mathbb{N}$ $overdraft : \mathbb{N}$
$balance \geq 0$ $overdraft \geq 0$