

$$VC[c](f) = (g, S) \quad \{R_1 \leq R_2\}$$

$$f := a \mid [b] \cdot a \mid f_1 \pm f_2 \mid f[x \mapsto a]$$

$$VC[\text{skip}](f) = (1 \neq f, \emptyset)$$

$$VC[x := a](f) = (1 \neq f[x \mapsto a], \emptyset)$$

$$VC[\text{empty}](f) = (f, \emptyset)$$

$$VC[\text{if } b \text{ then } c_1 \text{ else } c_2](f) = (1 \neq [b] \cdot g_1 + [\neg b] \cdot g_2, S_1 \cup S_2)$$

$$\text{donde } (g_1, S_1) = VC[c_1](f)$$

$$(g_2, S_2) = VC[c_2](f)$$

$$VC[c_1; c_2](f) = (g_1, S_1 \cup S_2)$$

$$\text{donde } (g_2, S_2) = VC[c_2](f)$$

$$(g_1, S_1) = VC[c_1](g_2)$$

$$VC[\text{while } b \text{ do } \{I\} c](f) = (I, \{1 \neq [b] \cdot g + [\neg b] \cdot f \leq I\} \cup S)$$

$$\text{donde } (g, S) = VC[c](I)$$

$$f = a \mid k \cdot f \mid [b] \cdot f \mid f_1 \pm f_2 \mid f[x \mapsto a]$$

$$\begin{cases} x \leq 0 \Rightarrow x + y \leq y \\ b \Rightarrow 1 \neq g \leq I \\ \neg b \Rightarrow 1 \neq f \leq I \end{cases}$$

$$\{ [b_1] \cdot [b_2] \cdot a, [b_1 \wedge b_2] \cdot a \}$$

$$[x \leq 0] \cdot (x + y) \leq y$$

$$[b]x + [\neg b] \cdot y$$

$$f = a \mid [b] \cdot a \mid f_1 \pm f_2$$

normalización