

Règles de la logique de Hoare

(rédigé par Julie Parreaux)

$$\begin{array}{l}
 [\text{skip}_H] \quad \{P\} \text{ skip } \{P\} \\
 [\text{ass}_H] \quad \{P[x \mapsto \mathcal{A}[a]]\} x := a \{P\} \\
 [\text{comp}_H] \quad \frac{\{P\} S_1 \{Q\} \quad \{Q\} S_2 \{R\}}{\{P\} S_1; S_2 \{R\}} \\
 [\text{if}_H] \quad \frac{\{\mathcal{B}[b] \wedge P\} S_1 \{Q\} \quad \{\neg \mathcal{B}[b] \wedge P\} S_2 \{Q\}}{\{P\} \text{ if } b \text{ then } S_1 \text{ else } S_2 \{Q\}} \\
 [\text{while}_H] \quad \frac{\{\mathcal{B}[b] \wedge P\} S \{P\}}{\{P\} \text{ while } b \text{ do } S \{\neg \mathcal{B}[b] \wedge P\}} \\
 [\text{cons}_H] \quad \frac{\{P'\} S \{Q'\}}{\{P\} S \{Q\}} \text{ si } P \Rightarrow P' \text{ et } Q' \Rightarrow Q
 \end{array}$$