

Règles de déduction en logique de Hoare

$$\vdash \{P[a/x]\} x := a \{P\}$$

$$\vdash \{P\} \text{ skip } \{P\}$$

Séquence :

$$\frac{\vdash \{P\} S_1 \{Q\} \quad \vdash \{Q\} S_2 \{R\}}{\vdash \{P\} S_1; S_2 \{R\}}$$

Condition :

$$\frac{\vdash \{b \wedge P\} S_1 \{Q\} \quad \vdash \{\neg b \wedge P\} S_2 \{Q\}}{\vdash \{P\} \text{ if } b \text{ then } S_1 \text{ else } S_2 \{Q\}}$$

While :

$$\frac{\vdash \{b \wedge P\} S \{P\}}{\vdash \{P\} \text{ while } b \text{ do } S \{\neg b \wedge P\}}$$

Conséquence :

$$\text{Si } P \implies P' \text{ et } Q' \implies Q \text{ alors } \frac{\vdash \{P'\} S \{Q'\}}{\vdash \{P\} S \{Q\}}$$