

Hoare Axioms

<p>Assignment</p> $\frac{}{\{P[x \rightarrow e]\} x:=e \{P\}}$	<p>Consecution</p> $\frac{\{P\} S1 \{Q\} \quad \{Q\} S2 \{R\}}{\{P\} S1; S2 \{R\}}$
<p>Conditional</p> $\frac{\{P \wedge c\} S1 \{Q\} \quad \{P \wedge \neg c\} S2 \{Q\}}{\{P\} \text{if } c \text{ then } S1 \text{ else } S2 \text{ fi } \{Q\}}$	<p>While</p> $\frac{\{P \wedge c\} S \{P\}}{\{P\} \text{while } c \text{ do } S \text{ od } \{P \wedge \neg c\}}$
<p>Strengthen Precondition</p> $\frac{\{P\} S \{Q\} \quad P' \rightarrow P}{\{P'\} S \{Q\}}$	<p>Weaken Postcondition</p> $\frac{\{P\} S \{Q\} \quad Q \rightarrow Q'}{\{P\} S \{Q'\}}$