

modeling language with nondeterministic choice

$$\begin{aligned} \textit{stmt} \stackrel{\text{def}}{=} & \quad x := \textit{expr} \quad | \quad \textit{stmt}_1; \textit{stmt}_2 \quad | \\ & \quad \text{DO } ::g_1 \Rightarrow \textit{stmt}_1 \quad \dots \quad ::g_n \Rightarrow \textit{stmt}_n \quad \text{OD} \\ & \quad \text{IF } ::g_1 \Rightarrow \textit{stmt}_1 \quad \dots \quad ::g_n \Rightarrow \textit{stmt}_n \quad \text{FI} \\ & \quad \vdots \end{aligned}$$

where x is a typed variable and \textit{expr} an expression of the same type

semantics of a **GCL**-program: program graph