

Hausaufgabe 03

10052776/10050965

Jan Börnert, Damian Ernst

Aufgabe 1

1) First-Mengen

$\text{First}(\text{steam}) = \{ \text{Stdout}, \text{Stderr} \}$

$\text{First}(\text{sink}) = \{ \text{Stdout}, \text{Stderr} \}$

$\text{First}(\text{element}) = \{ \text{Con} \}$

$\text{First}(\text{Stdout}) = \{ \text{Stdout} \}$

$\text{First}(\text{Stderr}) = \{ \text{Stderr} \}$

$\text{First}(\text{Con}) = \{ \text{Con} \}$

$\text{First}(\text{Int}) = \{ \text{Int} \}$

$\text{First}(\text{Endl}) = \{ \text{Endl} \}$

2) Follow-Mengen

$\text{Follow}(\text{steam}) = \{ \varepsilon \}$

$\text{Follow}(\text{sink}) = \{ \text{Con} \}$

$\text{Follow}(\text{element}) = \{ \text{EOF} \}$

3) PREDICT-Mengen (da für alle $\text{EPS}(\alpha) = \text{false}$ gilt, gelten die First-Mengen)

$\text{Predict}(\text{steam}) = \{ \text{Stdout}, \text{Stderr} \}$

$\text{Predict}(\text{sink}) = \{ \text{Stdout}, \text{Stderr} \}$

$\text{Predict}(\text{element}) = \{ \text{Con} \}$

$\text{stream} \rightarrow \text{sink element EOF}$

$\text{sink} \rightarrow \text{Stdout} \mid \text{Stderr}$

$\text{element} \rightarrow \text{Con Int element} \mid \text{Con Endl}$