

Struct属性翻译文法作业

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Struct的文法

| | |
|---|---|
| $\langle struct \rangle$ | $::= \text{'struct' '{' } \langle body \rangle \text{'}' ';'}$ |
| $\langle body \rangle$ | $::= \langle declaration \rangle \mid \langle declaration \rangle \langle body \rangle$ |
| $\langle declaration \rangle$ | $::= \langle type \rangle \langle identifier \text{ list} \rangle$ |
| $\langle identifier \text{ list} \rangle$ | $::= \langle identifier \rangle \text{';' } \mid \langle identifier \rangle \text{' ,' } \langle identifier \text{ list} \rangle$ |
| $\langle identifier \rangle$ | $::= \text{IDENTIFIER}$ |

Struct的属性翻译文法

| | |
|---|--|
| $\langle struct \rangle_{\uparrow s_1 \downarrow t_2}$ | $::= \text{'struct' '{' } \langle body \rangle_{\uparrow s_2 \downarrow t_2} \text{'}' ';'}$ |
| $\langle body \rangle_{\uparrow s_1 \downarrow t_1}$ | $::= \langle declaration \rangle_{\uparrow new \downarrow old} \mid \langle declaration \rangle_{\uparrow new \downarrow old} \langle body \rangle_{\uparrow s_2 \downarrow t_2}$ |
| $\langle declaration \rangle_{\uparrow new \downarrow old}$ | $::= \langle type \rangle_{\uparrow Type} \langle identifier \text{ list} \rangle_{\uparrow vars} @f_{\uparrow new \downarrow old, vars, Type}$ |
| $\langle identifier \text{ list} \rangle_{\uparrow vars}$ | $::= \langle identifier \rangle_{\uparrow id} \text{';' } @item2list_{\uparrow vars \downarrow id} \mid \langle identifier \rangle_{\uparrow id} \text{' ,' } \langle identifier \text{ list} \rangle_{\uparrow vars, old} @addlist_{\uparrow vars \downarrow id}$ |
| $\langle identifier \rangle_{\uparrow id}$ | $::= \text{IDENTIFIER} @2id_{\uparrow id}$ |