

# Projekt Java Compiler

Spezielle Kapitel der Praktischen Informatik: Compilerbau

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Universität Tübingen

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Parser

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└─ Agenda

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└ Allgemein

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Projekt Java Compiler  
└─ Parser

Parser

Parser



```
%right in
%right ASSIGN ADD ...
%right QUESTIONMARK COLON
%left OR
...
%nonassoc LESSER GREATER LESSER_EQUAL ...
...
%nonassoc INCREMENT DECREMENT
```

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└ Parser

└ Parser - Operatoren Priorität

Parser - Operatoren Priorität

```
%right in
%right ASSIGN ADD ...
%right QUESTIONMARK COLON
%left OR
...
%nonassoc LESSER GREATER LESSER_EQUAL ...
...
%nonassoc INCREMENT DECREMENT
```

Program

```
: Class           { [$1] }  
| Program Class   { $1 ++ [$2] }  
| Program SEMICOLON { $1 }
```

Statement

```
: SingleStatement SEMICOLON      { $1 }  
...  
| IF LEFT_PARENTHESIS Expression RIGHT_PARENTHESIS  
  Statement ELSE Statement  
  { If $3 $5 (Just $7) }  
  
| IF LEFT_PARENTHESIS Expression  
  RIGHT_PARENTHESIS Statement  
  %prec THEN  
  { If $3 $5 Nothing }  
| Switch  
  { $1 }
```

```
Program  
- Class           { [$1] }  
+ Program Class   { $1 ++ [$2] }  
+ Program SEMICOLON { $1 }  
  
Statement  
- SingleStatement SEMICOLON      { $1 }  
  
+ IF LEFT_PARENTHESIS Expression RIGHT_PARENTHESIS  
  Statement ELSE Statement      { If $3 $5 (Just $7) }  
  
+ IF LEFT_PARENTHESIS Expression  
  RIGHT_PARENTHESIS Statement  
  %prec THEN  
  { If $3 $5 Nothing }  
+ Switch  
  { $1 }
```

```
class SimpleIf {
    int i;
    void dolf() {
        int a;
        a = 5;
        i = 0;
        if (a < 5) {
            i = a;
        }
        else {
            i = 2;
        }
    }
}
```



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