

```
1 grammar IfStat;
2
3 @header {
4 package ifstat;
5 }
6
7 prog : stat EOF ;
8
9 stat : 'if' expr 'then' stat
10      | 'if' expr 'then' stat 'else' stat
11      | expr
12      ;
13
14 // The following stat rule using '?' also works as expected.
15 //stat : 'if' expr 'then' stat ('else' stat)? ;
16 //      | expr
17 //      ;
18
19 expr : ID ;
20
21 ID : [a-z]+ ;
22 WS : [ \t\n\r]+ -> skip ;
```

```
1 grammar IfStatOpenMatched;
2
3 @header {
4 package ifstat;
5 }
6
7 prog : stat EOF ;
8
9 stat : matched_stat | open_stat ;
10
11 matched_stat : 'if' expr 'then' matched_stat 'else' matched_stat
12              | expr
13              ;
14
15 open_stat: 'if' expr 'then' stat
16          | 'if' expr 'then' matched_stat 'else' open_stat
17          ;
18
19 expr : ID ;
20
21 ID : [a-z]+ ;
22 WS : [ \t\n\r]+ -> skip ;
```