

Connor Nagel

Hw4

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P209.4.1

$S \rightarrow ABC$ Condition: $A.c=B.c=C.c$

$A \rightarrow a$ $A.c := 1$

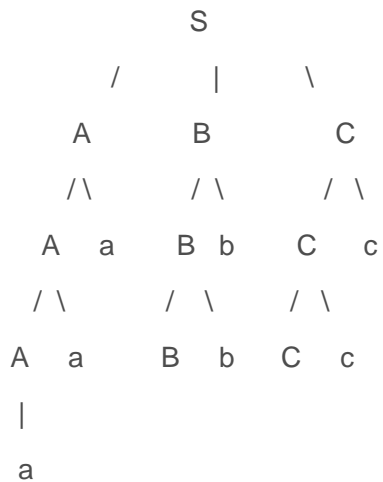
$A1 \rightarrow A2a$ $A1.c := A2.c + 1$

$B \rightarrow b$ $B.c := 1$

$B1 \rightarrow B2b$ $B1.c := B2.c + 1$

$C \rightarrow c$ $C.c := 1$

$C1 \rightarrow C2c$ $C1.c := C2.c + 1$



P286:6.1

The statements are not contradictory. The binary arithmetic operators being left-associative just dictates which order the operations must be placed. The compiler evaluates the operations separately and in any order it wants. The first rule does not restrict the compilers ability to do so.

P287:6.8

It is not a coincidence; the reference model uses a single object that is referenced many times. It is hard to know where the references are and how many there are so garbage collection is important.

P289:6.25

```
bool blank =false;
do {
line = read_line();
if (all_blanks(line)) blank=true;
consume_line(line);
}while(!blank);
```

P290:6.26

```
int zeroRow =-1;
int i,j;
for(i=0;i<n;i++){
bool hasNonZero = false;
for(j=0;j<n;j++){
if(a[i][j] != 0){
hasNonZero=true;
}
}
If(!hasNonZero && zeroRow ==-1){
zeroRow = i;
}
}
```