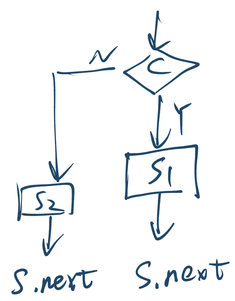

$S \rightarrow if(C)\ S_1\ else\ S_2$

(1) SDT $S \rightarrow if(\{L_1 = new();\ L_2 = new();$
$C.true = L_1,\ C.false = L_2\}$
$C)\ \{S_1.next = S.next$
$S_1\ else\ \{S_2.next = S.next\}$
$S_2\ \{S.code = C.code \| Label \| L_1 \| S_1.code \| Label \| L_2 \| S_2.code\}$

(2)
```
void S (label next)
    Label L1, L2;
    if(当前输入 == token if){
        advance input;
        check '(' is next on the input and advance;
        L1 = new() L2 = new()
        C(L1, L2);
        check ')' is next on the input and advance;
        print("label", L1); S(next);
        check current token is 'else', and advance;
        print("label", L2); S(next);
    } else ...
```

(3) $S \rightarrow if(M\ C)\ N\ S_1\ else\ K S_2$

$M \rightarrow \varepsilon\ \{L_1 = new();\ L_2 = new();$
$C.true = L_1;\ C.false = L_2;$
$N \rightarrow \varepsilon\ \{S_1.next = stack[top-6].next$
$K \rightarrow \varepsilon\ \{S_2.next = stack[top-9]\ next$
$tempCode = stack[top-6].code \| label$
$stack[top-7].L_1 \|$
$stack[top-3].code \| Label$
$stack[top-7].L_2 \|$
$stack[top].code$