

```
1: push $
2: push start state  $s_0$ 
3:  $word \leftarrow NextWord()$ 
4: loop forever
5:    $state \leftarrow$  top of stack
6:   if  $Action[state, word] = \text{"reduce } A \rightarrow \beta_1\beta_2 \cdots \beta_k\text{"}$  then
7:     ▷ 因为每次都push两个元素：一个是符号（终结符或非终结符），另一个是语法分析的状态
8:     pop  $2k$  symbols
9:      $state \leftarrow$  top of stack
10:    push  $A$ 
11:    push  $Goto[state, A]$ 
12:  else if  $Action[state, word] = \text{"shift } s_i\text{"}$  then
13:    push  $word$ 
14:    push  $s_i$ 
15:     $word \leftarrow NextWord()$ 
16:  else if  $Action[state, word] = \text{"accept"}$  then
17:    break
18:  else
19:     $Fail()$ 
20:  end if
21: end
22: report success
```