Introduction to Language Theory and Compilation Exercises

Session 5: Pushdown automata and parsing

(1)	<program>	→	begin <statement list> end
(2)	<statement list>	→	<statement> <statement tail>
(3)	<statement tail>	→	<statement> <statement tail>
(4)	<statement tail>	→	ε
(5)	<statement>	→	ID := <expression> ;
(6)	<statement>	→	read (<id list>) ;
(7)	<statement>	→	write (<expr list>) ;
(8)	<id list>	→	ID <id tail>
(9)	<id tail>	→	, ID <id tail>
(10)	<id tail>	→	ε
(11)	<expr list>	→	<expression> <expr tail>
(12)	<expr tail>	→	, <expression> <expr tail>
(13)	<expr tail>	→	ε
(14)	<expression>	→	<primary> <primary tail>
(15)	<primary tail>	→	<add op> <primary> <primary tail>
(16)	<primary tail>	→	ε
(17)	<primary>	→	(<expression>)
(18)	<primary>	→	ID
(19)	<primary>	→	INTLIT
(20)	<add op>	→	$+$
(21)	<add op>	→	$-$
(22)	<S>	→	<program> $