$$P ::= D^* \ S^* \tag{1}$$

$$
\begin{aligned}
D ::=\ & a & \text{(2)}\\
\ |\ & m(f_1, ..., f_k) & \text{(3)}\\
\ |\ & cs(f_1, ..., f_k) & \text{(4)}\\
\ |\ & f(f_1, ..., f_k) & \text{(5)}
\end{aligned}
$$

$$
\begin{aligned}
S ::=\ & x = new\ c([a_1, ..., a_k]); & \text{(6)}\\
\ |\ & x = y; & \text{(7)}\\
\ |\ & [x =]\ y.m([a_1, ..., a_k]); & \text{(8)}\\
\ |\ & [x =]\ f([a_1, ..., a_k]); & \text{(9)}
\end{aligned}
$$

Legend:

Metasymbols: * (repetition), | (alternative), [ ] (optional part)

Non terminals: upper case letters

Fully scoped identifiers: lower case letters

Terminals: all the other symbols

Class scope identifiers:

a:	class attribute name	$< attr >$
m:	method name	$< meth >$
$f_1, ..., f_k$:	formal parameters	$< param >$
x, y:	program locations	$< progloc >$
$a_1, ..., a_1$:	actual parameters	$< progloc >$
cs:	class constructor	$< constr >$
c:	class name	$< class >$
f:	function name	$< function >$

where:

$< attr >$	attribute	$[< nid >] < cid > < vid >$
$< meth >$	method	$[< nid >] < cid > < mid >$
$< param >$	parameter	$[< nid >] < cid > < mid > \ . \ < vid >$
$< constr >$	class constructor	$[< nid >] < cid > < cid >$
$< class >$	class name	$[< nid >] < cid >$
$< var >$	variable	$[< nid >] \ [< cid > < mid > \ | \ < fid >] \ . \ < vid >$
$< progloc >$	program location	$< var > \ | \ < attr > \ | \ < param >$
$< nid >$	namespace identifier	
$< cid >$	class identifier	
$< mid >$	method identifier	
$< fid >$	function identifier	
$< vid >$	variable identifier	