

(*Phrase*) $p ::= e \mid c$

(*Expr*) $e ::= x \mid n \mid l \mid e + e' \mid e - e' \mid e = e' \mid$
 $e < e' \mid \mathbf{proc} \ (\mathbf{in} \ x_1, \mathbf{inout} \ x_2, \mathbf{out} \ x_3) \ c$

(*Comm*) $c ::= e := e' \mid c; c' \mid e(e_1, e_2, e_3) \mid \mathbf{while} \ e \ \mathbf{do} \ c \mid$
 $\mathbf{if} \ e \ \mathbf{then} \ c \ \mathbf{else} \ c' \mid \mathbf{letvar} \ x := e \ \mathbf{in} \ c \mid$
 $\mathbf{letproc} \ x(\mathbf{in} \ x_1, \mathbf{inout} \ x_2, \mathbf{out} \ x_3) \ c \ \mathbf{in} \ c'$