Grammar

Definition

These lines contain the grammar matching with the Lutin language, that is used in the project.

- **1)** P → BD BI
- 2) $BD \rightarrow BD D pv$
- **3)** BI → BI I pv
- **4)** D \rightarrow var id IDL
- 5) IDL → IDL vir id
- **6)** D → const INI INIL
- **7)** INIL → INIL vir INI
- 8) INI \rightarrow id eg num
- **9)** I \rightarrow ecrire E'
- **10)** I → id aff E'
- **11)** I \rightarrow lire id
- **12)** E' → E
- 13) $E \to E + T$
- 14) $E \rightarrow E T$
- **15)** E → T
- 16) $T \rightarrow T * F$
- 17) $T \rightarrow T/F$
- **18)** T → F
- **19)** $F \rightarrow (E)$
- 20) $F \rightarrow id$
- **21)** F → num
- **22)** BD → ε
- **23)** BI → ε
- **24)** IDL $\rightarrow \epsilon$
- 25) INIL $\rightarrow \epsilon$

Indications

Nonterminal symbols

Symbol Meaning

- P Program
- BD Declaration Block
- BI Instruction Block
- D Declaration
- I Instruction

```
IDL IDentifiers List
INI INItializer
INIL INItialisers List
E/E' Expression ( '+' / '-' term)
T Term ( '/' / '*' term)
F Final
```

Terminal symbols

number

ecrire 'ecrire' keyword

'lire' keyword

num

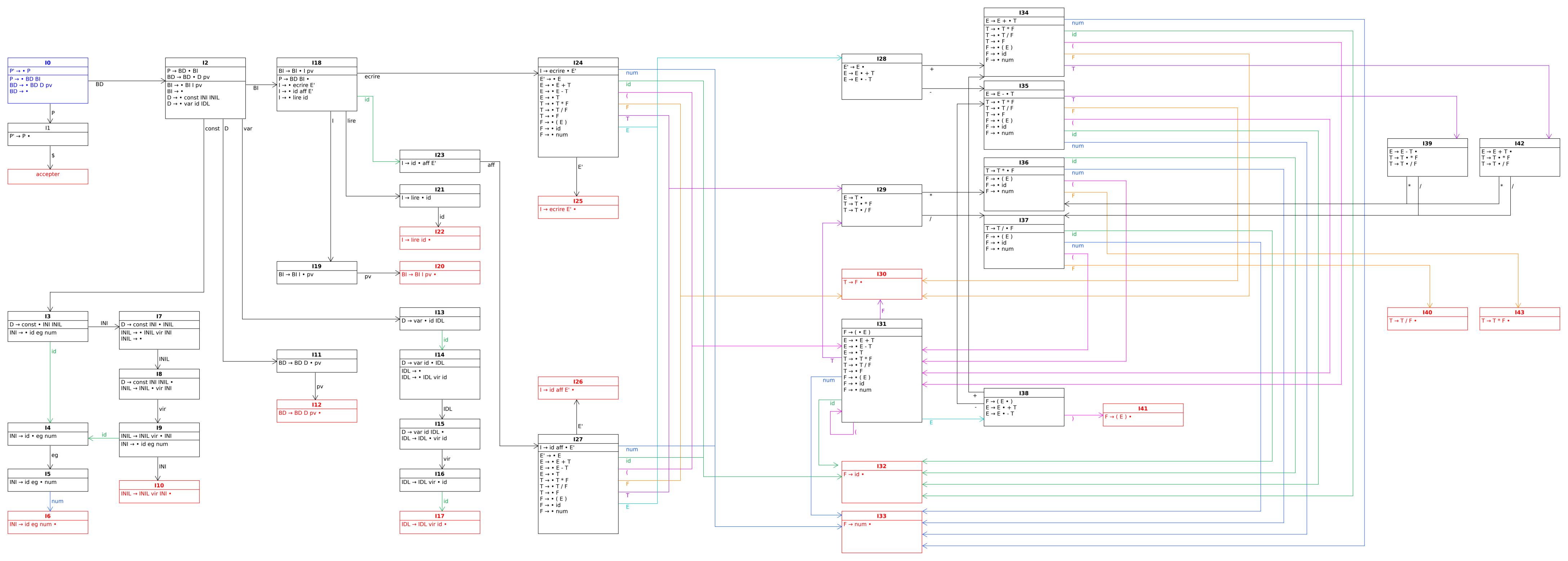
lire

Symbol Meaning Regular Expression '+' character '-' character * '*' character '/' character / '(' character () ')' character pv semicolon identifier (variable name) [a-zA-Z_] [a-zA-Z0-9_]* id 'var' keyword var var comma vir const 'const' keyword const '=' character eg = aff ':=' characters :=

[0-9]+(,[0-9]+)?

ecrire

lire



			סועוט	UPEN	CLUS	ID	NUM	VAR	CONS	PV	VIR	EQ	WRIT	READ	AFF	END	;	Р	BD	ВІ	D	- 1	IDL	INI	INIL	F	EPRI	т	F
						r22			r22					r22		r22		1	2	וט			IUL	IIVI	IIAIL		LPN		I'
																acc													
						r23		d13	d3				r23	r23		r23				18	11								
						d4																		7					
												d5																	
							d6																						
										r8	r8																		
										r25	r25														8				
										r6	d9																		
						d4																		10					
										r7	r7																		
										d12																			
						r2		r2	r2				r2	r2		r2													
						d14																							
										r24	r24												15						
										r4	d16																		
						d17																							
										r5	r5																		
						d23							d24	d21		r1						19							
										d20																			
						r3							r3	r3		r3													
						d22																							
										r11																			
															d27														
				d31		d32	d33																			28	25	29	30
										r9																			
										r10																			
				d31		d32	d33																			28	26	29	30
d34	d35									r12																			
	r15	d36	d37		r15					r15																			
r18	r18	r18	r18		r18					r18																			
		-		d31		d32	d33																			38		29	30
r20	r20	r20	r20		r20					r20																			
r21	r21	r21	r21	46.4	r21	100	100			r21																			
				d31			d33																					42	30
				d31		d32	d33																					39	30
				d31			d33																						43
404	405			d31	464	d32	d33																						40
d34		426	497		d41					p4.4																			
	r14	d36	d37		r14					r14																			
		r17			r17					r17																			
	r19	r19	r19		r19					r19																			
	r13	d36	d37		r13					r13																			
r16	r16	r16	r16		r16					r16																			

