

سؤال ۱

۲۸ سه شنبه

فروردین ۱۴۰۳

16 April 2024

۱۴۴۵ شوال ۷

L.val = EV2

E.val = EV2

T.val = EV2

F.val = ε

digit.

lexval = ε

T.val = 111

*

F.val = 111

(

E.val = 111

E.val = 111

+

T.val = 0

F.val = 0

digit.

lexval = 5

E.val = 9

+

T.val = 9

F.val = 9

digit.lexval = 9

T.val = 10

T.val = 1

*

F.val = 8

digit.lexval = 8

F.val = 13

+

E.val = 1

T.val = 1

F.val = 1

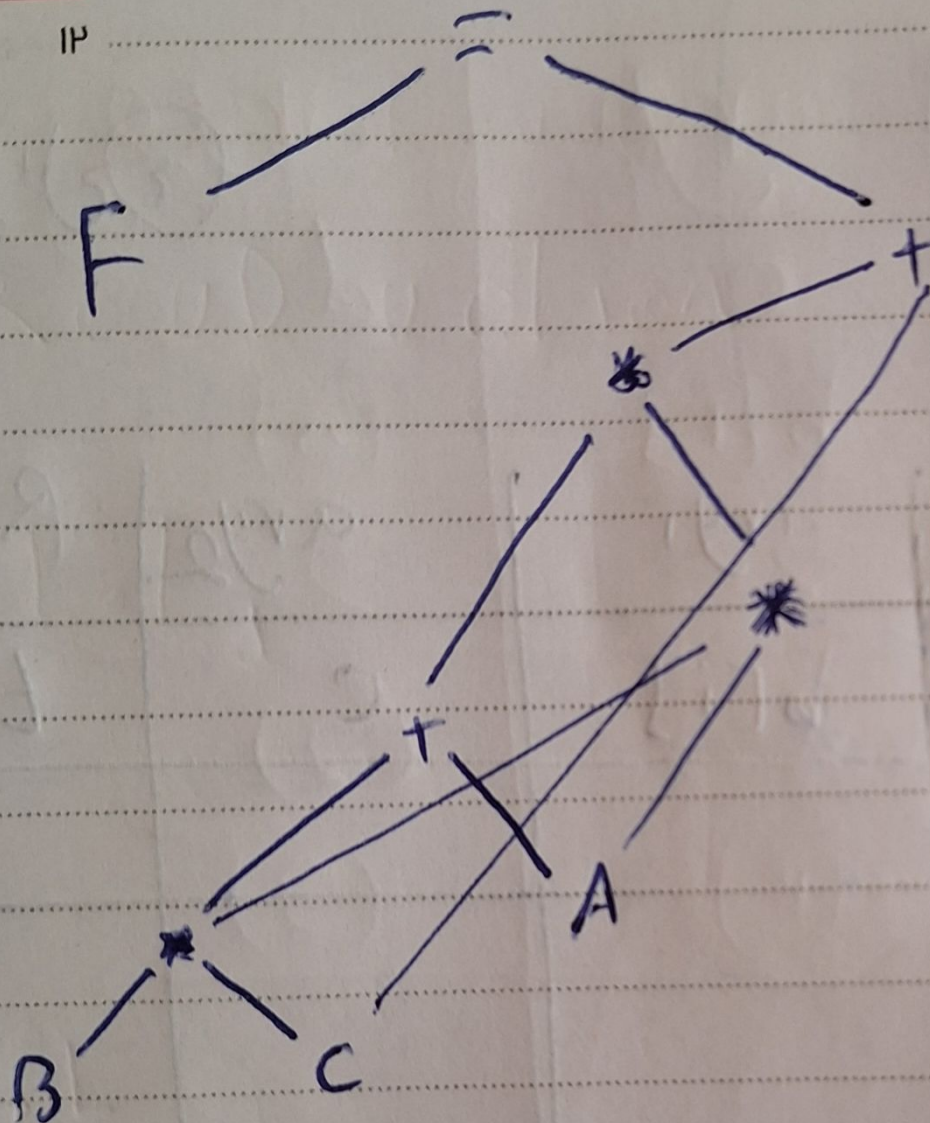
digit.lexval = 6

digit.lexval = 6

سؤال ۲

1. $S \rightarrow L \cdot L_{\text{subone}}$ 1. $L.\text{inl} = 0$ 2. $L_{\text{subone}}.\text{inl} = -1$ 3. $S.\text{val} = L.\text{syn} + L_{\text{subone}}.\text{syn}$ 2. $S \rightarrow L$ 1. $L.\text{inl} = 0$ 2. $S.\text{val} = L.\text{syn}$ 3. $L \rightarrow L_{\text{subone}} B$ 1. $L_{\text{subone}}.\text{inl} = L.\text{inl} + 1$ 2. $B.\text{inl} = L.\text{inl}$ 3. $L.\text{syn} = L_{\text{subone}}.\text{syn} * B.\text{syn}$ 4. $L \rightarrow B$ 1. $L.\text{syn} = B.\text{syn} * 2^{L.\text{inl}}$ 5. $B \rightarrow \text{digit}$ 1. $B.\text{syn} = \text{digit} \cdot L.\text{val}$

نوع ال (B)



@vadrple

سوال ۴

از دیهشت ۱۴۰۳

8

	op	arg1	arg2	result
9				
0	=[]	b	i	t ₁
1	*	c	d	t ₂
10				
2	-	t ₁	t ₂	t ₃
3	param	x		
11				
4	+	z	2	t ₄
5	param	t ₄		
12				
6	call	f	2	t ₅
7	+	t ₃	t ₅	t ₆
8	-[]	a	i	t _v
9	=	t ₉		t _v

15

سؤال آزاد

Triple

	op	arg1	arg2
0	=[]	b	i
1	*	c	d
2	-	(0)	(1)
3	param	x	
4	+	z	2
5	param	(x)	
6	call	L	2
7	+	(2)	(0)
8	=[]	a	i
9	=	(8)	(7)

سؤال ۵ الف

8

 $L_1:$ if false $n > 0$ goto L_3

9

if false $n < 100$ goto L_3 $t_1 = n + 1$ $n = t_1$

10

if false $n > 20$ goto L_2 $t_2 = n + 2$ $n = t_2$

11

 $L_2: t_3 = n + 3$ $n = t_3$ goto L_1

12

 $L_3:$

سؤال 50 ب

production

$$S \rightarrow d \cdot S, \text{ while } (B)$$

semantic rules

$$\text{begin} = \text{newLabel}()$$
$$S_1.\text{next} = \text{begin}$$
$$B.\text{True} = \text{newLabel}()$$
$$B.\text{False} = S.\text{next}()$$
$$S.\text{code} = S_1.\text{code} \parallel B.\text{code} \parallel \text{Label}(B.\text{True}) \parallel$$
$$\text{gen}('go to' \text{ begin})$$

در ابتدا initial

نوعی ۶

$\langle t_1, t_2, t_3 \rangle$

B₁ $i = 1$

B₂ $j = 1$

B₃

~~$t_1 = 10 * i \rightarrow 1 + t_1$~~
 ~~$t_2 = t_1 + j$~~ $t_2 = t_2 + 1$
 $t_3 = 8 * t_2 \rightarrow \langle t_3 \rangle$
 $t_4 = t_3 - 88$
 $a[t_4] = 0.0$
 $j = j + 1$
 $i \neq j \leq 109 \rightarrow B_3$

B₄

~~$i = i + 1$~~
~~if $i \leq 10$ goto B₃~~

$t_1 \leq 100$

سوال ۶

dp = 0

i = 0

L = t1 * i

t2 = A[t1]

~~t3 = i * A~~

t4 = B[t3] → B[t1]

t5 = t2 * t4

dp = dp + 5

i = i + 1

if i < n goto L

نوع ۱

n * n = (m)

نوع ۲

dp = 0

t1 = 0

m = 1 * n

L = t1 + 1

t5 = A[t1] + B[t2]

dp = dp + 5

if t1 < m goto L

dp = 0

t1 = 0

m = 1 * n

L = t1 + 1 < t2 = A[t1]

~~t4 = B[t1]~~

t5 = ~~t2~~ * t4

dp = dp + 5

if t1 < m goto L

که مایه نرسد