

```

1 Q1.
2 E -> max ( E LAM )
3
4 LAM -> ', ' E LAM
5 | //Mot vide
6
7
8 Q2.
9 TOKENS={MAX}
10
11 E : max( e1=E] LAM) -> ^(MAX e1 LAM?)
12
13 LAM -> ', ' E LAM -> E LAM?
14 | //Mot vide
15
16
17 Q3.
18
19 E[ts] :
20 max( E1[ts] LAM[ ts , max_place ] )
21 {
22     max_place = NouvVar();
23     E.code = E1.code @@ (=, max_place , E1.place , _ ) @@ LAM.code ;
24     E.place = max_place;
25 }
26 ;
27
28 LAM[ ts , max_place ]:
29
30 ', ' E[ts] LAM[ts, max_place]
31 {
32     label_suite = NouvLabel();
33     resultat = NouvVar();
34     LAM.code = E.code @@ (>=, resultat , max_place, E.place) @@
35     (ifnz label_suite, resultat, _ , _ )@@
36     (=, max_place, E.place, _ )@@
37     (label label_suite, _ , _ , _ )
38 }
39 | //Mot vide
40 ;
41
42 Exemple :
43
44 max(3+2, x+2, 11)
45
46 (+, t0, 3, 2)
47 (=, max_place, t0, _ )
48
49 (+, t1, x, 2)
50 (>=, res1, max_place, t1)
51 (ifnz label_suite1, res1, _ , _ )
52 (=, max_place, t1, _ )
53 (label label_suite1, _ , _ , _ )
54
55 (const 11, t2, _ , _ )
56 (>=, res2, max_place, t2)
57 (ifnz label_suite2, res2, _ , _ )
58 (=, max_place, t2, _ )
59 (label label_suite2, _ , _ , _ )
60
61 Q4.
62
63 E -> argmax ( E LAM_indice )
64
65 LAM_indice -> ', ' E LAM_indice
66 | //Mot vide
67
68
69 E[ts] :
70 max( E1[ts] LAM_indice[ ts , max_place , indice_place , indice_max_place] )
71 {
72     max_place = NouvVar();
73     indice_place = NouvVar();
74     indice_max_place= NouvVar();
75     E.code = E1.code @@ (=, indice_place , 0, _ )@@ (=, indice_max_place , 0, _ )
76     @@ (=, max_place , E.place, _ ) @@ LAM_indice.code ;
77     E.place = indice_max_place;
78 }
79 ;
80

```

```

81
82 LAM_indice[ ts , max_place , indice_place]:
83
84 ', ' E[ts] LAM_indice[ts, max_place , indice_place]
85 {
86     label_suite = NouvLabel();
87     resultat = NouvVar();
88     temp_indice = NouvVar();
89     LAM_indice.code = E.code @@ (>=, resultat , max_place, E.place) @@
90     (=, temp_indice, indice_place, _ )@@
91     (+, indice_place, temp_indice, 1 )@@
92
93     (ifnz label_suite, resultat, _ , _ )@@
94     (=, max_place, E.place, _ )@@
95     (=, indice_max_place, indice_place, _ )@@
96
97     (label label_suite, _ , _ , _ )
98 }
99 | //Mot vide
100 ;

```