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: - 2014-15
: . , .

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5:

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Prolog
.
, [] , ...
[a, b, c, d] ( : a,b,c,d)
[a, 3, name(kostas,antoniou)] ( a, 3 name(kostas, antoniou)
[[a,b], [c,d]] ( : [a,b] [c,d])

Prolog
, n-
( ) (
).
[H | T]
(H) (T). H T
[]
?- [H|T] = [a,b,c,d].
H = a
T = [b,c,d]
?- [H|T] = [[a,b],[c,d]].
H = [a, b]
T = [[c, d]]
?- [H|T] = [a].
H = a
T = []

?- [H|T] = [].
No

: "," ( ) "|" ( )
"," ( ) "|" ( )
:
?- [A,B,C] = [1,2,3].
A=1
B=2
C=3
?- [A|B|C] = [1,2,3].
No
?- [A|[B|C]] = [1,2,3].
A=1
B=2
C=[3]

```

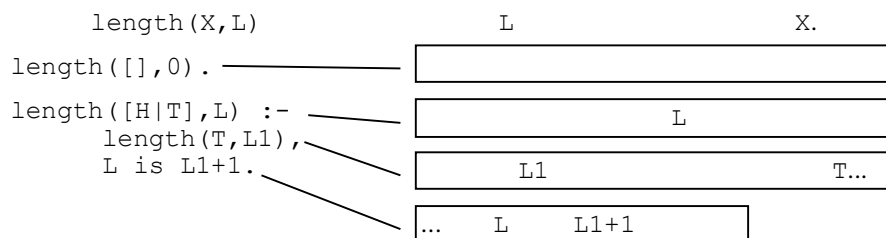
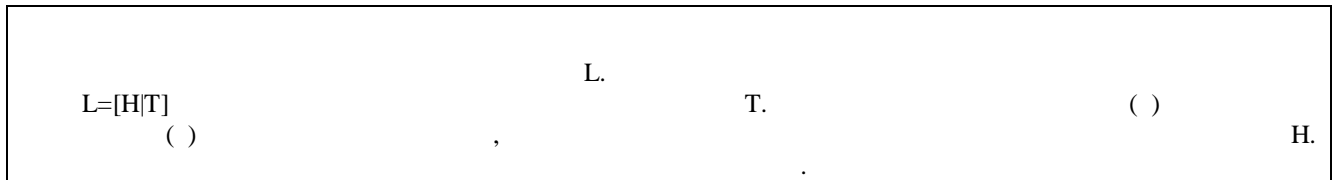
[1, 2, 3] . : [1|[2|[3]]].

```

Prolog
.
.
.
son(X,Y) :-
    son(X,Y).

```

"stack overflow"



```

() sum(L,X)
    X
    L ( L
    ).

?- sum([3,5,11,9], X).
X=28

?- sum([-3, 3.14, 11,9], X).
X=20.14

() teleytaio(L,X):
    X
    L.
    ,
    ?- teleytaio([4,a,d,2], X).
    X=2
    ?- teleytaio([red, blue, green], X).
    X=green

() melos(X,L):
    Yes
    X
    L
    No
    .
    ,
    ?- melos(a, [1,2,3,a,b]).
    Yes
    ?- melos(yellow, [red, blue, green]).
    No

() element(L,N,X)
    X
    N-
    L.
    ,
    ?- element([a,b,c,d], 3, X).
    X = c
    ?- element([a, b, c], 1, X).
    X = a

    ?- element([a, [c,e], d], 2, X).
    X = [c,e]
    ?- element([[a,b], [c], d], 4, X).

    No

() max(L,X)
    X
    L ( L
    ).
    ,
    ?- max([13,52,12,29], X).
    X=52
    ?- max([-13, 14, -32, 9], X).
    X=14

```

ΣΥΜΠΛΗΡΩΜΑΤΙΚΕΣ ΑΣΚΗΣΕΙΣ

<p>(1)</p> <pre> del(X,L,NL): . , ?- del(a,[1,2,3,a,b],L). L= [1,2,3,b]</pre>	<table border="0" style="width: 100%;"> <tr> <td style="text-align: center; width: 33%;">X</td> <td style="text-align: center; width: 33%;">L</td> <td style="text-align: center; width: 33%;">NL</td> </tr> </table> <pre> ?- del(blue,[red,blue,green,blue],L). L = [red,green,blue] ->; L = [red,blue,green]</pre>	X	L	NL
X	L	NL		

<p>(1)</p> <pre> delall(X,L,NL): NL . , ?- delall(a,[1,α,2,3,a,b],L). L= [1,2,3,b]</pre>	<table border="0" style="width: 100%;"> <tr> <td style="text-align: center; width: 33%;">X</td> <td style="text-align: center; width: 33%;">L</td> </tr> </table> <pre> ?- delall(blue,[red,blue,green,blue],L). L = [red,green]</pre>	X	L
X	L		