(10)
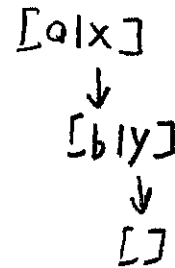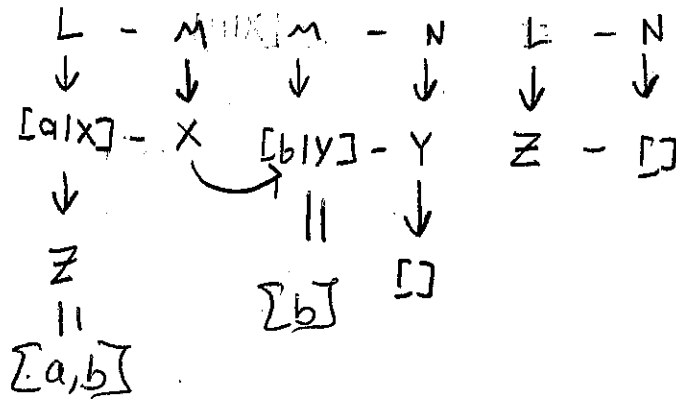
1. What is the result of the following query?

?- appdDL(L - M, M - N, L - N) = appdDL([a|X]-X, [b|Y] - Y, Z - []).

L   -   M   M   -   N   L   -   N
↓   ↓   ↓   ↓   ↓   ↓
[a|x] - X   [b|Y] - Y   Z   -   []
↓ || ↓
Z   [b]   []
||
[a,b]

[a|x]
↓
[b|y]
↓
[]

([a,b])

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[a|[b|[]]]

1. What is the result of the following query?

?- appdDL(L - M, M - N, L - N) = appdDL([a|X]-X, [b|Y] - Y, Z - []).
                                        L   M   m   N   L   N

$$L = [a, b]$$
$$M = [b]$$
$$N = []$$

(10)

$$L = X . [a,b]$$
$$Y = []$$
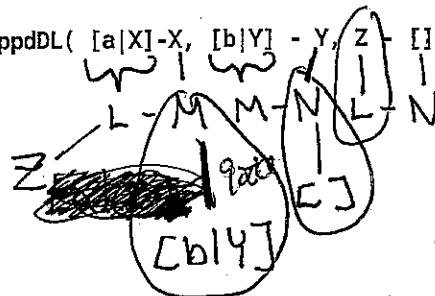
$$X = [b]$$

yes   Nice job

1. What is the result of the following query?

?- appdDL(L - M, M - N, L - N) = appdDL([a|X]-X, [b|Y] - Y, Z - []).

$([a|x]-X, [b|Y]-Y, Z-[])$

$L = Z = [a|x]$
$M = X = [b|Y]$
$N = [] \ @ = Y$

$X = M = [b|Y]$

$Y = N = []$

$Z = L = [a|x] \rightarrow [a,b]$

$\bigotimes 8$

$L = X$
$M = [b]$
$N = [] \checkmark$

$X = [b]$

$Y = []$

$Z = [a,b]$

---

1. What is the result of the following query?

?- appdDL(L - M, M - N, L - N) = appdDL([a|X]-X, [b|Y] - Y, Z - []).

L - M M - N L - N

Z ▓▓▓ gate
[b|Y]

[]

$[a|x]-[b|Y]-[],$

$[a,b]-[]?$

$Z = [a,b] \checkmark$

$N = [] \checkmark$

9 8 8

$L?,$ $Z?$

$M?$

$X?$

1. What is the result of the following query?

appdD

?- appdDL(L - M, M - N, L - N) = appdDL([a|X]-X, [b|Y] - Y, Z - []).

appdDL (~~~~~~~~~~~~~~~~~~~~~~~). is this trying to unify two functors?

$$appdDL\ (\ [1,2] - [3,4],\ [3,4] - [5,6],\ [1,2] - [5,6]$$

$$= appdDL(\ [1],\ [3],\ [\ ]).$$

(3)

removes the tail.

---

1. What is the result of the following query?

?- appdDL(L - M, M - N, L - N) = appdDL([a|X]-X, [b|Y] - Y, Z - []).

[a] , [b] ,

X - 1st element -X , Y - 1st element , Z

L = a (1st of X)

M = X without 1st element

(a,b,c) → [a,a,b,c] ,

M = b (1st of Y

(4)

N = []