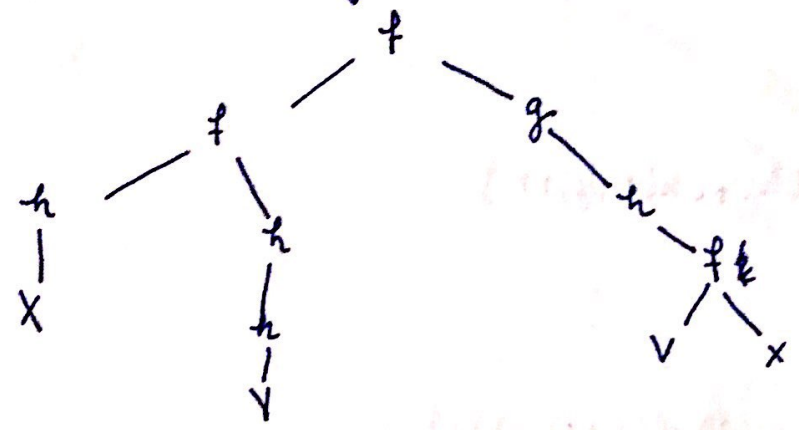
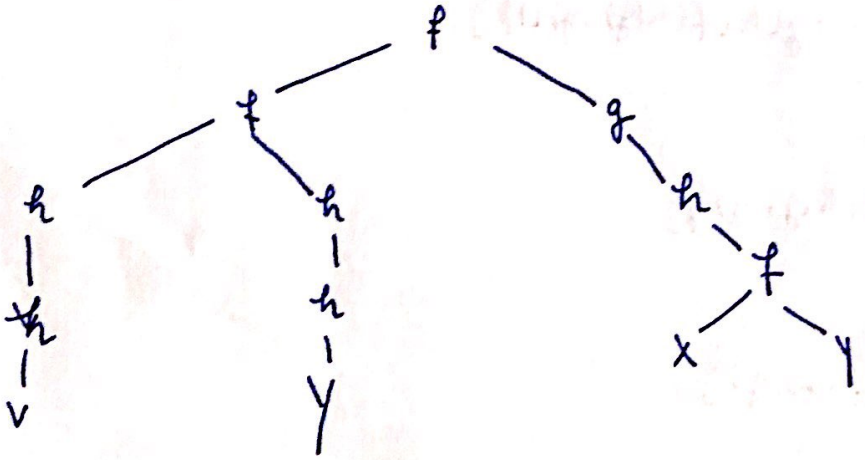
Examen Programare Logică

1. $f(f(h(x), h(h(v))), g(h(f(v,x))))$



$f(f(h(h(v)), h(h(y))), g(h(f(x,y))))$



$S = \emptyset$

$R = \{ f(f(h(x), h(h(v))), g(h(f(v,x)))) = f(f(h(h(v)), h(h(y))), g(h(f(x,y)))) \}$

Descompune

$S = \emptyset$

$R = \{ f(h(x), h(h(v))) = f(h(h(v)), h(h(y))), \ (*)$

$g(h(f(v,x))) = g(h(f(x,y))) \}$

Descompune (*)

$S = \emptyset$

$R = \{ h(x) = h(h(v)) \ (\circledast), \ h(h(v)) = h(h(y)),$

$g(h(f(v,x))) = g(h(f(x,y))) \}$

Descompune $\circledast$

$S = \emptyset$

$R = \{ x = h(v) \ (*), \ h(h(v)) = h(h(y)),$

$g(h(f(v,x))) = g(h(f(x,y))) \}$

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Rezolvă

$S = \{x = h(v)\}$

$R = \{h(h(v)) = h(h(y))^{(*)},$

$g(h\{f(v, h(v))\}) = g(h(f(h(v), y)))\}$

~~Rezolvă~~ Descompune (*)

$S = \{x = h(v)\}$

$R = \{$ ~~h h h~~ $h(v) = h(y)\}^{(*)},$

$g(h(f(v, h(v)))) = g(h(f(h(v), y)))\}$

Descompune (x)

$S = \{x = h(v)\}$

$R = \{$ ~~h~~ $v = y\}^{(x)},$

$g(h(f(v, h(v)))) = g(h(f(h(v), y)))\}$

Rezolvă (*)

$S = \{x = h(v), v = y\}$

$R = \{g(h(f(y, h(y)))) = g(h(f(h(y), y)))\}\}$

Descompune

$S = \{x = h(v), v = y\}$

$R = \{h(f(y, h(y))) = h(f(h(y), y))\}\}$

Descompunere

$S = \{x = h(v), v = y\}$

$R = \{f(y, h(y)) = f(h(y), y)\}$

Descompunere

$S = \{x = h(v), v = y\}$

$R = \{y = h(y), h(y) = y\}$ -> eroare, nu avem unificator

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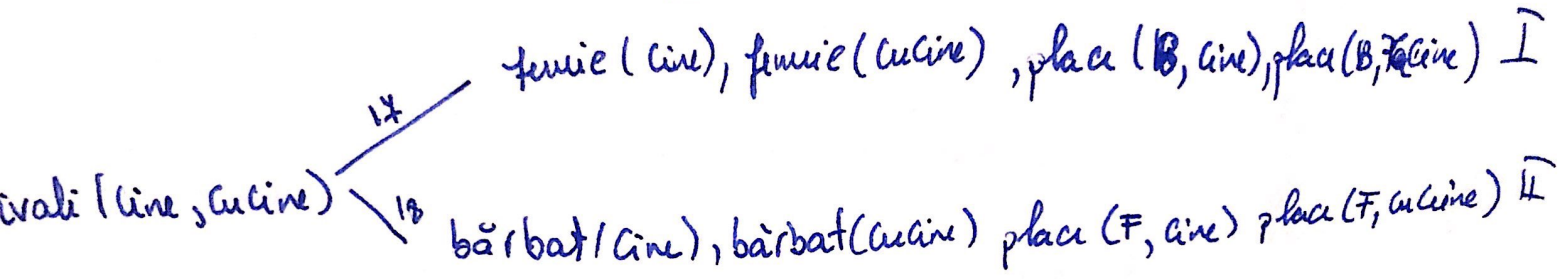

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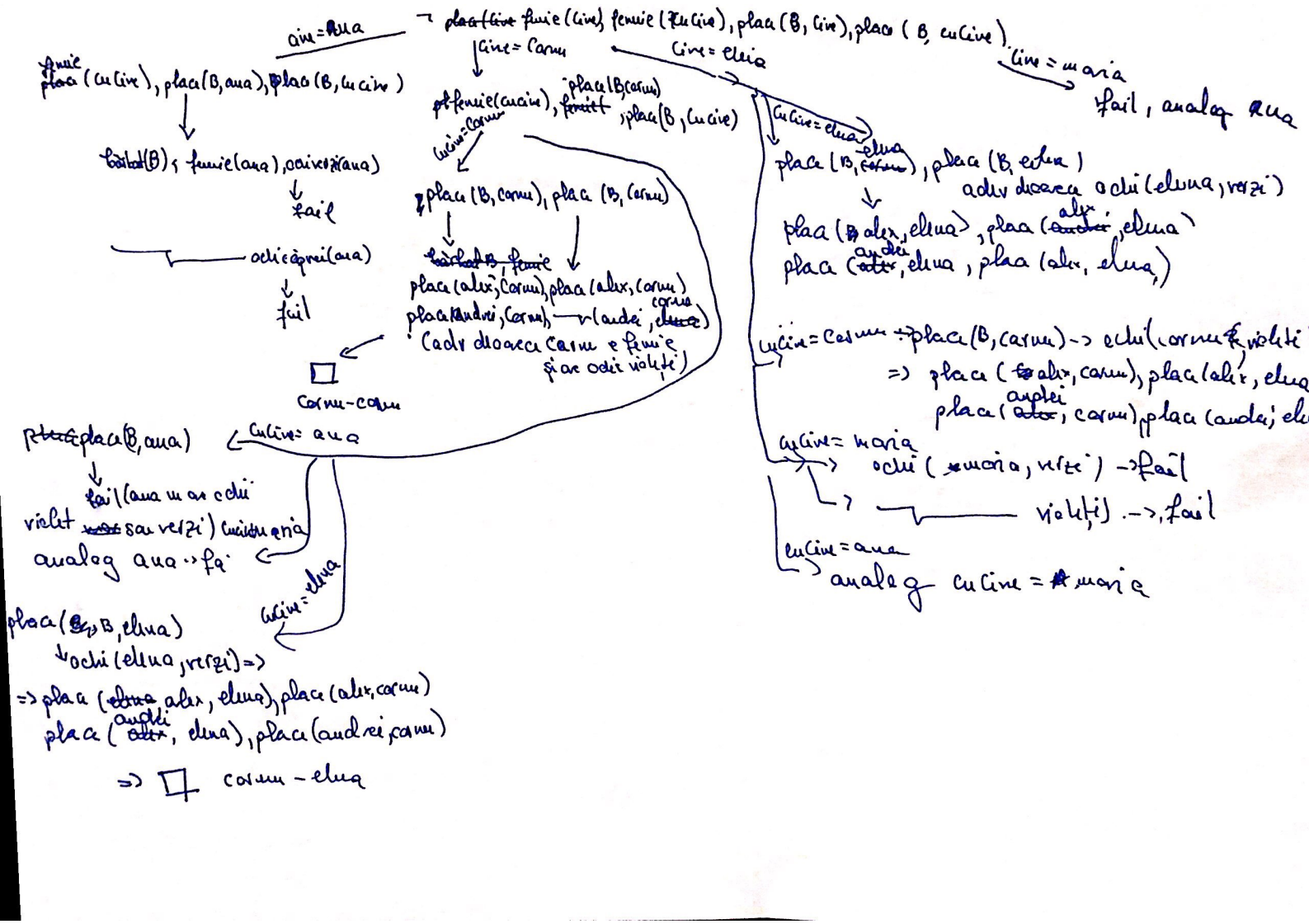

cine = ana

¬ ~~place(cine~~ femie(cine), femie(cucine), place(B, cine), place(B, cucine)

cine = Carmu

femie(cucine), place(B, ana), place(B, cucine)

↓

~~barbat~~(B), femie(ana), ochi verzi(ana)

↓

fail

ochi caprei(ana)

↓

fail

femie(cucine), ~~femie~~ place(B, carmu), place(B, cucine)

cucine = Carmu

place(B, carmu), place(B, carmu)

↓

~~barbat B, femie~~

place(alex, carmu), place(alex, carmu)

place(andrei, carmu) → (andrei, ~~elena~~ carmu)

(adv deoarece carmu e femie și are ochi violeți)

□

carmu - carmu

cine = elena

cucine = elena

place(B, ~~carmu~~ elena), place(B, elena)

adv deoarece ochi(elena, verzi)

↓

place(alex, elena), place(~~andrei~~ alex, elena)

place(~~alex~~ andrei, elena, place(alex, elena)

cucine = carmu → place(B, carmu) → ochi(carmu, violeți)

⇒ place(alex, carmu), place(alex, elena)

place(~~alex~~ andrei, carmu), place(andrei, elena)

cucine = maria

→ ochi(maria, verzi) → fail

→ violeți) → fail

cucine = ana

analog cucine = maria

cine = maria

fail, analog ana

cucine = ana

~~place~~ place(B, ana)

↓

fail (ana m are ochi violet ~~...~~ sau verzi) cucine maria

analog ana → fai

cucine = elena

place(B, elena)

↓ ochi(elena, verzi) ⇒

⇒ place(~~elena~~ alex, elena), place(alex, carmu)

place(~~alex~~ andrei, elena), place(andrei, carmu)

⇒ □ carmu - elena

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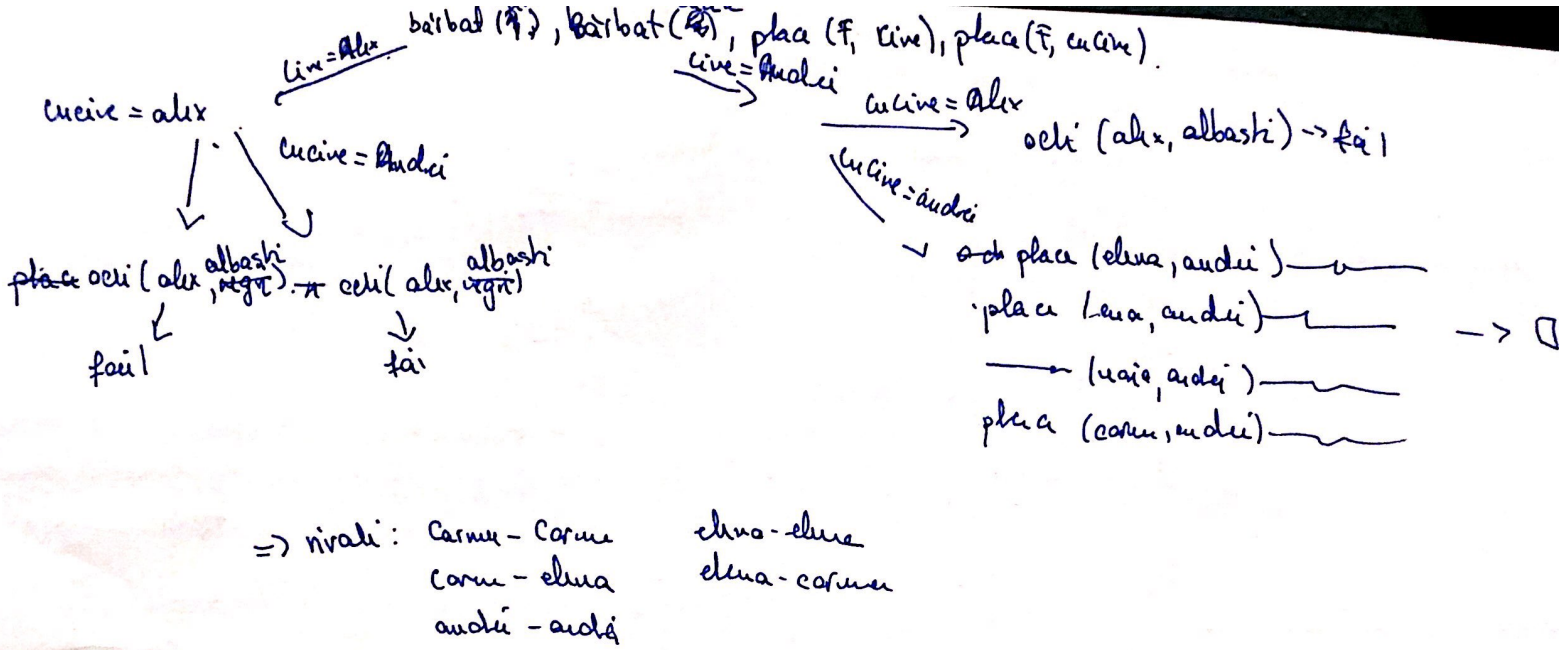

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