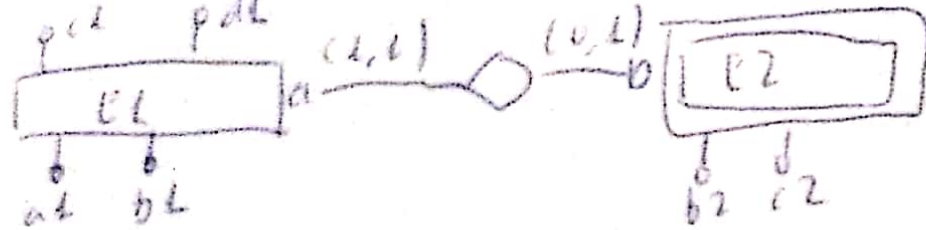


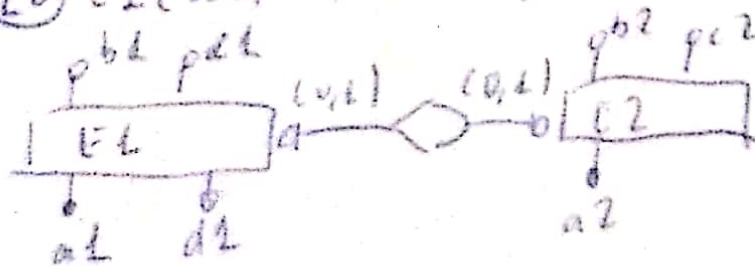
9)  $E1(a1, b1, c1, d1); E2(a2, b2, c2)$ ; Interrelación  $(1,1)-(0,2)$  y claves

$(a1, b1)$  y  $(a2)$ , siendo  $a1 = a2$



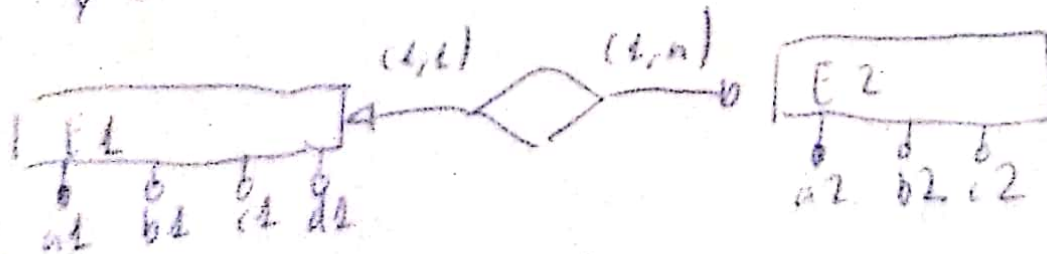
FK  $R1(\underline{a1}, \underline{b1}, c1, d1)$   
 $R2(\underline{a2}, b2, c2)$

10)  $E1(a1, b1, c1, d1); E2(a2, b2, c2)$ ; Interrelación  $(0,1)-(0,1)$  y claves  $(a1)$  y  $(a2)$



FK  $R1(\underline{a1}, b1, c1, d1)$   
 $R2(\underline{a2}, b2, c2)$   
 $R3(\underline{a1}, \underline{a2})$   
 not null

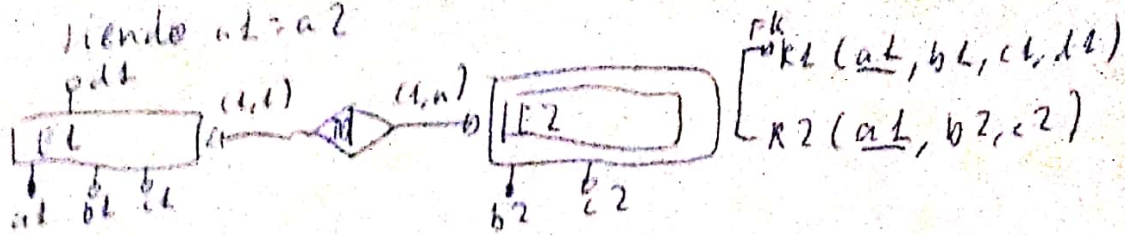
11)  $E1(a1, b1, c1, d1); E2(a2, b2, c2)$ ; Interrelación  $(1,1)-(1,n)$  y claves  $(a1)$  y  $(a2)$



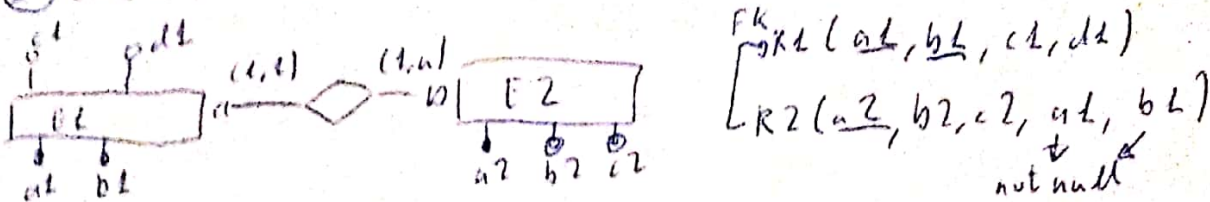
FK  $R1(\underline{a1}, b1, c1, d1)$   
 $R2(\underline{a2}, b2, c2, \underline{a1})$   
 not null

(17)  $E1(a1, b1, c1, d1); E2(a2, b2, c2); (1,1)-(1,n)$  y claves  $(a1)$  y  $(a2, b2)$ ,

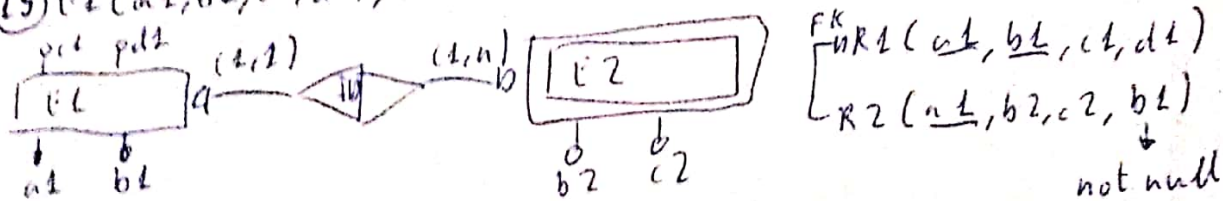
siendo  $a1 = a2$



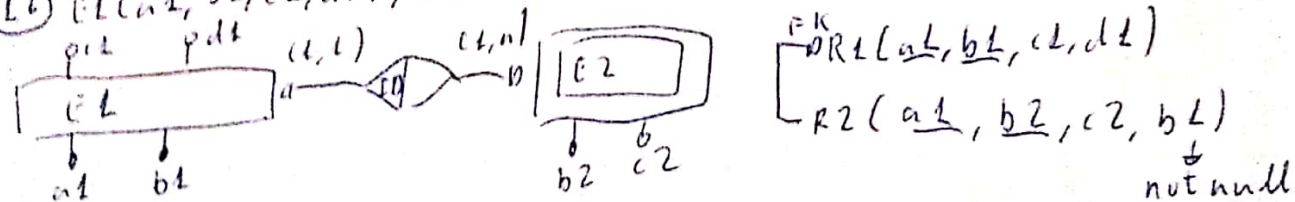
(18)  $E1(a1, b1, c1, d1); E2(a2, b2, c2); (1,1)-(1,n)$  y claves  $(a1, b1)$  y  $(a2)$



(19)  $E1(a1, b1, c1, d1); E2(a2, b2, c2); (1,1)-(1,n); PK(a1, b1)$  y  $PK(a2)$ , siendo  $a1 = a2$



(20)  $E1(a1, b1, c1, d1); E2(a2, b2, c2); (1,1)-(1,n); PK(a1, b1), PK(a2, b2); a1 = a2$



(21)  $E1(a1, b1, c1, d1); E2(a2, b2, c2);$  Interrelación  $(1,1)-(0,n); PK(a1), PK(a2)$

$R1(a1, b1, c1, d1)$   
 $R2(a2, b2, c2, a1)$   
 $\downarrow$   
 not null

(22)  $E1(a1, b1, c1, d1); E2(a2, b2, c2); (1,1)-(0,n); PK(a1), PK(a2, b2); a1 = a2$

$R1(a1, b1, c1, d1)$   
 $R2(a1, b2, c2)$



⑪  $f1(a1, b1, c1, d1); f2(a2, b2, c2); (c1) = (c2); f3(a1, b1), f3(a2)$

$f3(a1, b1, c1, d1)$   
 $f2(a2, b2, c2, a1, b1)$   
 $\swarrow$   
 $a1 \neq null$

⑫  $f1(a1, b1, c1, d1); f2(a2, b1, c2); (c1) = (c2); f3(a1, b1), f3(a2)$   
 $a1 = a2$

$f3(a1, b1, c1, d1)$   
 $f2(a2, b2, c2, b1)$   
 $\swarrow$   
 $a1 \neq null$

⑬  $f1(a1, b1, c1, d1); f2(a2, b1, c2); (c1) = (c2); f3(a1, b1), f3(a2, b2);$   
 $a1 = a2$

$f3(a1, b1, c1, d1)$   
 $f2(a2, b2, c2, b1)$   
 $\swarrow$   
 $a1 \neq null$

⑭  $f1(a1, b1, c1, d1); f2(a2, b2, c2); (c1) = (c2); f3(a1), f3(a2)$

$f3(a1, b1, c1, d1)$   
 $f2(a2, b2, c2, a1)$

⑮  $f1(a1, b1, c1, d1); f2(a2, b1, c2); (c1) = (c2), f3(a1), f3(a2, b2), a1 = a2$

$f3(a1, b1, c1, d1)$   
 $f2(a2, b2, c2)$

⑯  $f1(a1, b1, c1, d1); f2(a2, b2, c2); (c1) = (c2), f3(a1, b1), f3(a2)$

$f3(a1, b1, c1, d1)$   
 $f2(a2, b2, c2, a1, b1)$

⑰  $f1(a1, b1, c1, d1); f2(a2, b2, c2); (c1) = (c2); f3(a1, b1), f3(a2); a1 = a2$

$f3(a1, b1, c1, d1)$   
 $f2(a2, b2, c2, a1, b1)$

$$\textcircled{30} E1(a1, b1, c1, d1); E2(a2, b2, c2); (0,1) - (0,n); PK(a1, b1), PK(a2, b2); a1 = a2$$

$$\begin{array}{l} \text{FK} \\ \text{OR1}(a1, b1, c1, d1) \\ \text{R2}(a2, b2, c2, b1) \end{array}$$

$$\textcircled{32} E1(a1, b1, c1, d1); E2(a2, b2, c2); (0,1) - (0,n); PK(a1), PK(a2)$$

$$\begin{array}{l} \text{FK} \\ \text{R1}(a1, b1, c1, d1) \\ \text{R2}(a2, b2, c2, a1, b1) \end{array}$$

$$\textcircled{33} E1(a1, b1, c1, d1); E2(a2, b2, c2); (0,1) - (0,n); PK(a1), PK(a2, b2); a1 = a2$$

$$\begin{array}{l} \text{FK} \\ \text{OR1}(a1, b1, c1, d1) \\ \text{R2}(a2, b2, c2) \end{array}$$

$$\textcircled{35} E1(a1, b1, c1, d1); E2(a2, b2, c2); (0,1) - (0,n); PK(a1, b1), PK(a2)$$

$$\begin{array}{l} \text{FK} \\ \text{R1}(a1, b1, c1, d1) \\ \text{R2}(a2, b2, c2, a1, b1) \end{array}$$

$$\textcircled{36} E1(a1, b1, c1, d1); E2(a2, b2, c2); (0,1) - (0,n); PK(a1, b1), PK(a2); a1 = a2$$

$$\begin{array}{l} \text{FK} \\ \text{R1}(a1, b1, c1, d1) \\ \text{R2}(a1, b2, c2, b1) \end{array}$$

$$\textcircled{37} E1(a1, b1, c1, d1); E2(a2, b2, c2); (0,1) - (0,n); PK(a1, b1), PK(a2, b2); a1 = a2$$

$$\begin{array}{l} \text{FK} \\ \text{OR1}(a1, b1, c1, d1) \\ \text{R2}(a1, b2, c2, b1) \end{array}$$

$$\textcircled{39} E1(a1, b1, c1, d1); E2(a2, b2, c2); (1,n) - (1,n); PK(a1), PK(a2)$$

$$\begin{array}{l} \text{FK} \\ \text{OR1}(a1, b1, c1, d1) \\ \text{R2}(a2, b2, c2) \\ \text{R3}(a1, a2) \end{array}$$



$$(40) E1(a1, b1, c1, d1); E2(a2, b2, c2); (t, n) = (t, n); PK(a1), PK(a2, b2); a1 = a2$$

$$\begin{cases} PK1(a1, b1, c1, d1) \\ PK2(a1, b2, c2) \\ R3(a1, b2) \end{cases}$$

$$(41) E1(a1, b1, c1, d1); E2(a2, b2, c2); (t, n) = (t, n); PK(a1), PK(a2, b2); a1 = a2$$

$$\begin{cases} PK1(a1, b1, c1, d1) \\ PK2(a1, b2, c2) \\ R3(a1, b2) \end{cases}$$

$$(43) E1(a1, b1, c1, d1); E2(a2, b2, c2); (t, n) = (t, n); PK(a1, b1), PK(a2)$$

$$\begin{cases} PK1(a1, b1, c1, d1) \\ PK2(a1, b2, c2) \\ R3(a1, b1, a2) \end{cases}$$

$$(44) E1(a1, b1, c1, d1); E2(a2, b2, c2); (t, n) = (t, n); PK(a1, b1), PK(a2); a1 = a2$$

$$\begin{cases} PK1(a1, b1, c1, d1) \\ PK2(a1, b2, c2) \\ R3(a1, b1) \end{cases}$$

$$(45) E1(a1, b1, c1, d1); E2(a2, b2, c2); (t, n) = (t, n); PK(a1, b1), PK(a2, b2);$$

$$a1 = a2$$

$$\begin{cases} PK1(a1, b1, c1, d1) \\ PK2(a1, b2, c2) \\ R3(a1, b1, b2) \end{cases}$$