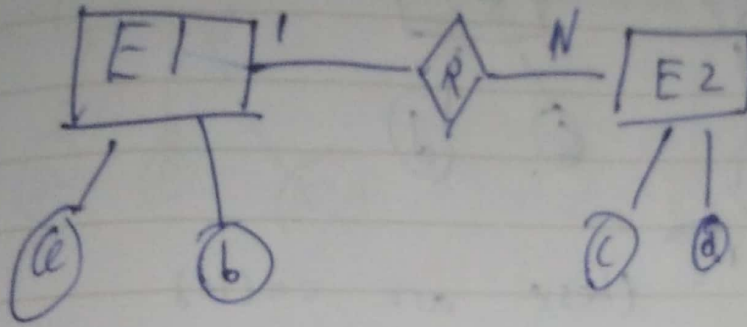


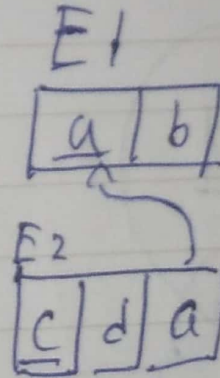
# Lab Relationship Schema mapping

## Rule 04 - Binary 1:N



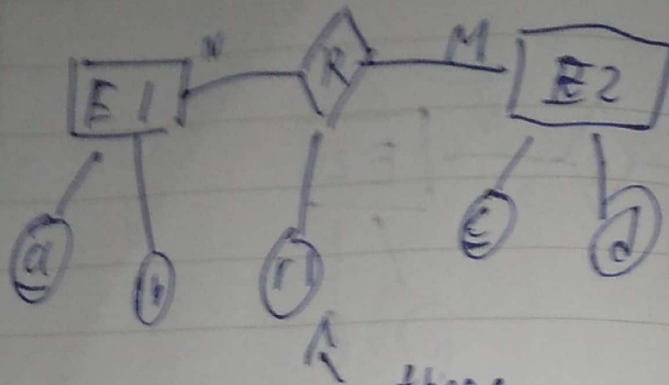
$E1(\underline{a}, b)$

$E2(\underline{c}, d, a)$

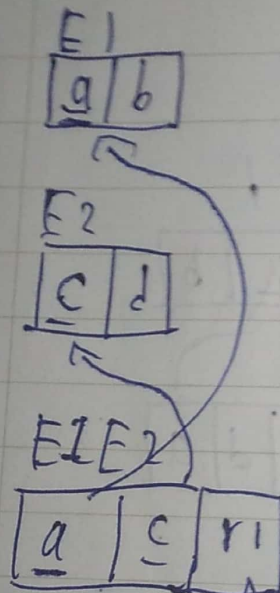


\* The PK of 1 side goes to N side

## Rule of binary N:M



these are called  
relation attribute



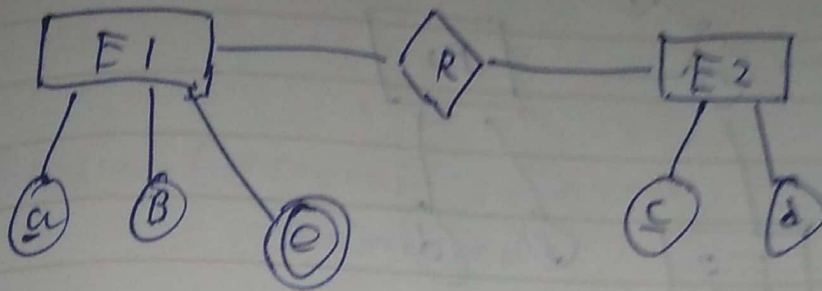
$E1(\underline{a}, b)$

$E2(\underline{c}, d)$

$E3(\underline{a}, \underline{c}, \underline{r1})$

put the relation attribute  
in a new table  
with the primary keys  
of the connected entities

## Rule 06 - Multivalued attribute



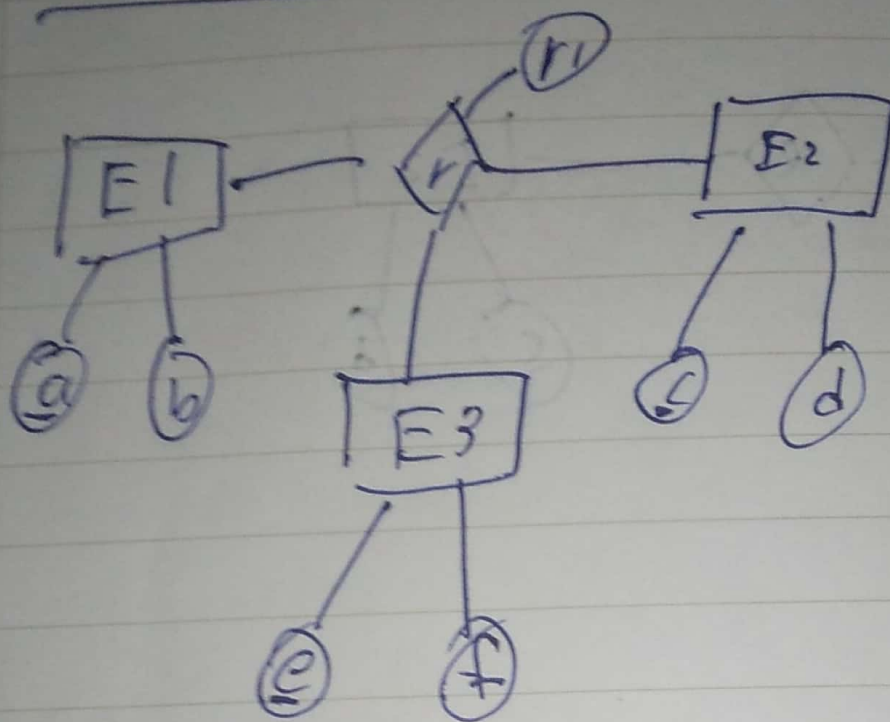
$E1(\underline{a}, B)$

$E2(c, d)$

$E1.e(\underline{a}, e)$



Rule 07 - N-ary



$E1(\underline{a}, b)$

$E2(c, \underline{d})$

$E3(\underline{e}, f)$

$E1, E2, E3(\underline{a}, \underline{c}, \underline{e}, R1)$

Student (Student\_ID, Given names, Surname, Date of birth, Year enrolled, program Id)

Program (Program Id, name, credit points, year commenced)

Course (C-ID, name, CP, YC, P-ID, Year, Sem)

Student\_Course (C-ID, S-ID, year, Sem, mark, grade)