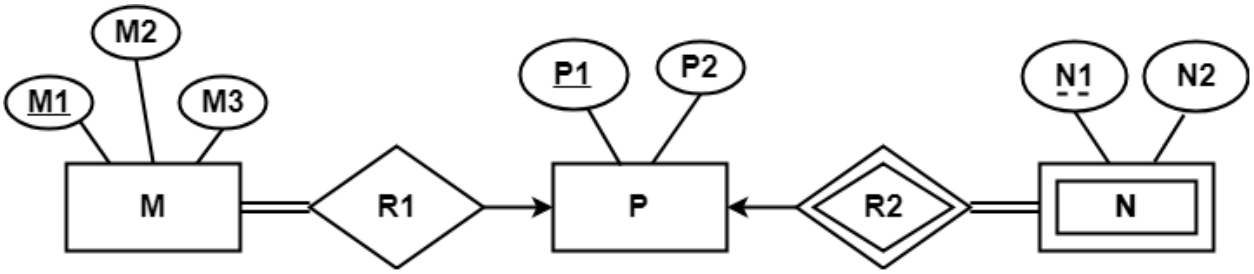
Problem-01:

Find the minimum number of tables required for the following ER diagram in relational model-



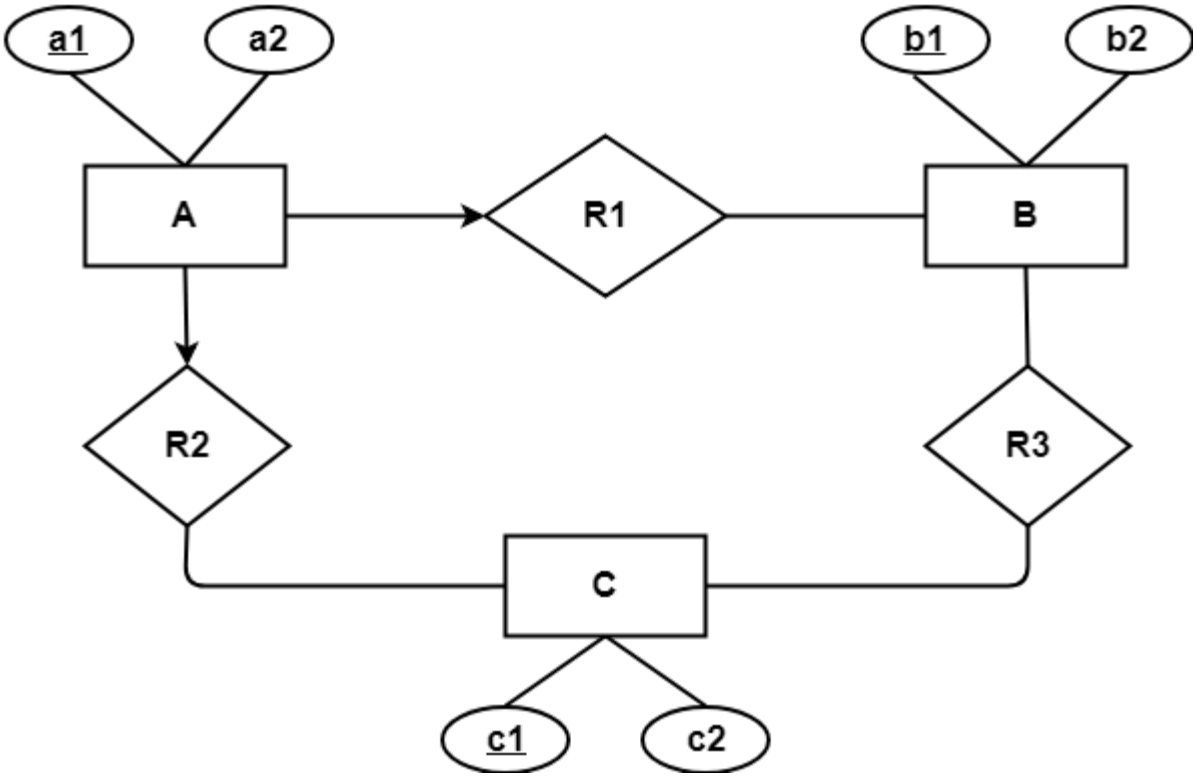
Solution-

Applying the rules, minimum 3 tables will be required-

- MR1 (M1 , M2 , M3 , P1)
- P (P1 , P2)
- NR2 (P1 , N1 , N2)

Problem-02:

Find the minimum number of tables required to represent the given ER diagram in relational model-



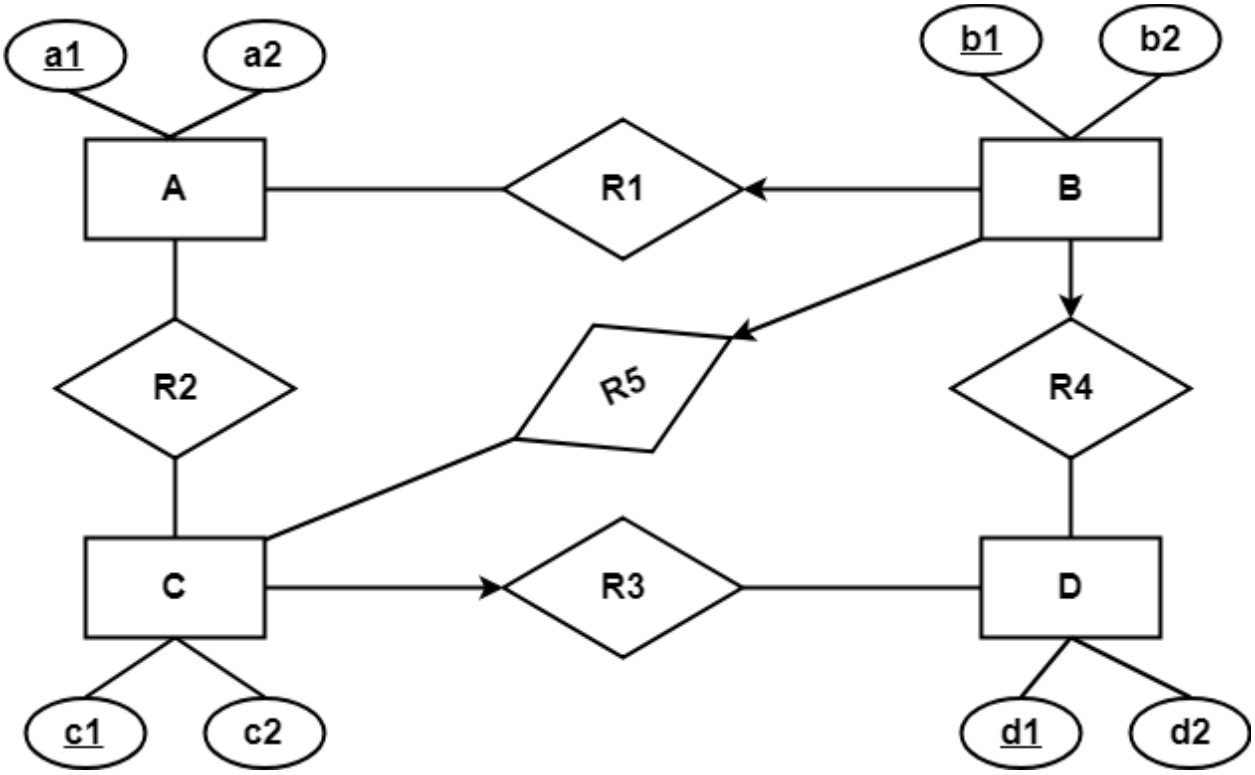
Solution-

Applying the rules, minimum 4 tables will be required-

- AR1R2 (a1 , a2 , b1 , c1)
- B (b1 , b2)
- C (c1 , c2)
- R3 (b1 , c1)

Problem-03:

Find the minimum number of tables required to represent the given ER diagram in relational model-



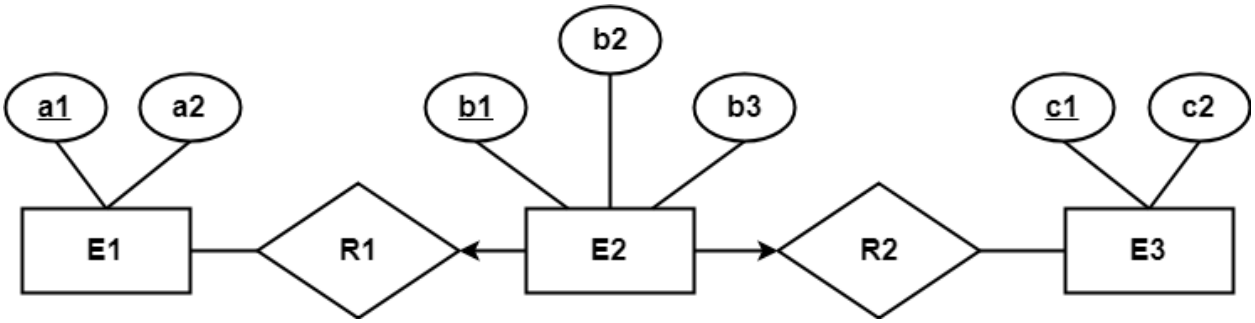
Solution-

Applying the rules, minimum 5 tables will be required-

- BR1R4R5 (b1 , b2 , a1 , c1 , d1)
- A (a1 , a2)
- R2 (a1 , c1)
- CR3 (c1 , c2 , d1)
- D (d1 , d2)

Problem-04:

Find the minimum number of tables required to represent the given ER diagram in relational model-



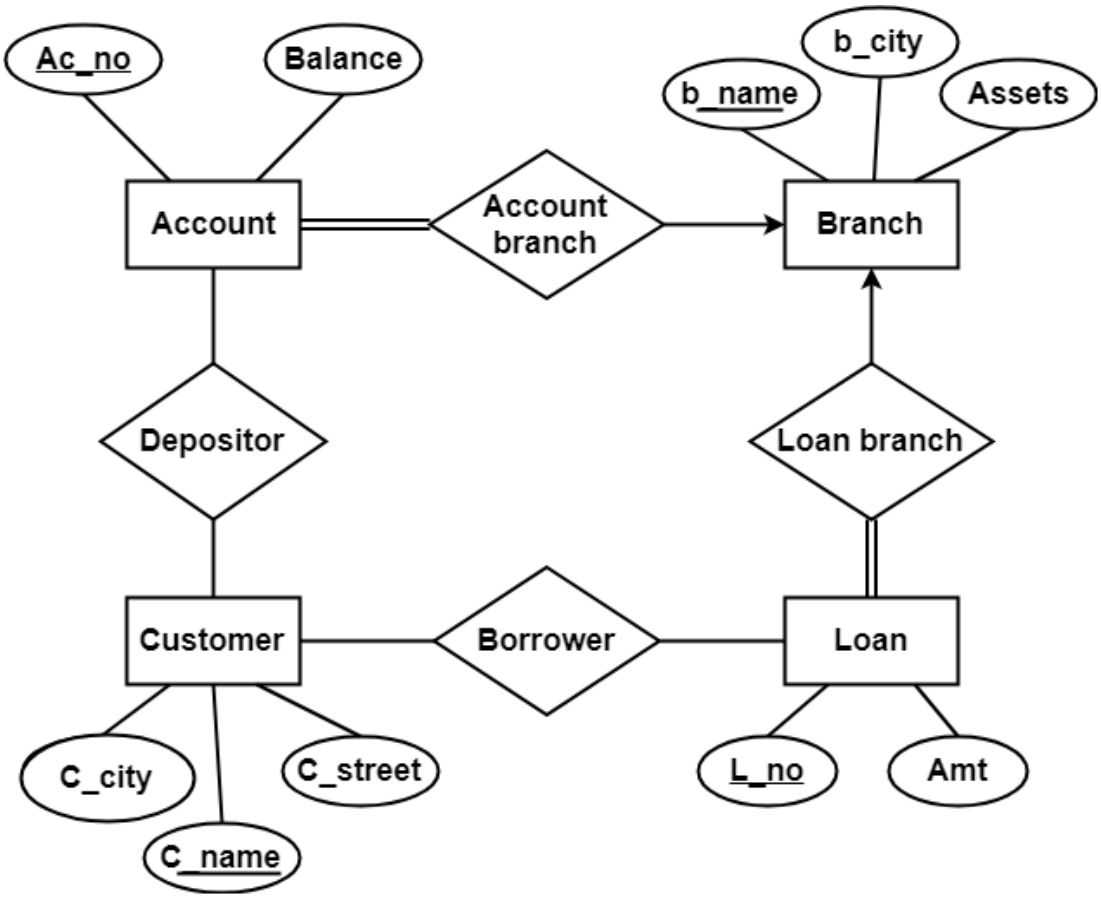
Solution-

Applying the rules, minimum 3 tables will be required-

- E1 (a1 , a2)
- E2R1R2 (b1 , b2 , a1 , c1 , b3)
- E3 (c1 , c2)

Problem-05:

Find the minimum number of tables required to represent the given ER diagram in relational model-



Solution-

Applying the rules that we have minimum 6 tables will be required-

- Account (Ac_no , Balance , b_name)
- Branch (b_name , b_city , Assets)
- Loan (L_no , Amt , b_name)
- Borrower (C_name , L_no)
- Customer (C_name , C_street , C_city)
- Depositor (C_name , Ac_no)