

case' pth:

1NF 2NF 3NF BENF

6 d d - k p ⇒ Cao o d d
d d Cao ⇒ k p d d

Luận:

1) \forall chọn chỉ 1 tt : Đạt 10²
thử 2nt

2) key \rightarrow 2 key : 0 đạt 2

3) \forall đth : VT là tìm kiếm \Rightarrow BCNF

$R7(ABCDE), F7 = \{ AB \rightarrow C, C \rightarrow D, D \rightarrow A \}$

$R(ABCEDE)$

$L = ABED$

$R = CEDA$

$NF = E$

$OL = B$

$LR = ACD$

$d \rightarrow e \rightarrow BE$ ~~$AC \rightarrow BE$~~

$A \rightarrow e \rightarrow ACED$ ~~$AD \rightarrow E$~~

$C \rightarrow e \rightarrow CEDA$ ~~$CD \rightarrow E$~~

$D \rightarrow e \rightarrow DNEAC$ ~~$ACD \rightarrow BE$~~

R, F

$(1NF, 2NF)$

BC

\Rightarrow BC

phân tích

$\left\{ \begin{array}{l} R_1, F_1 \\ \vdots \\ R_k, F_k \end{array} \right\}$

Cây phân rã
 qđc: \sim K

R, F

$\subseteq \text{BCNF}$



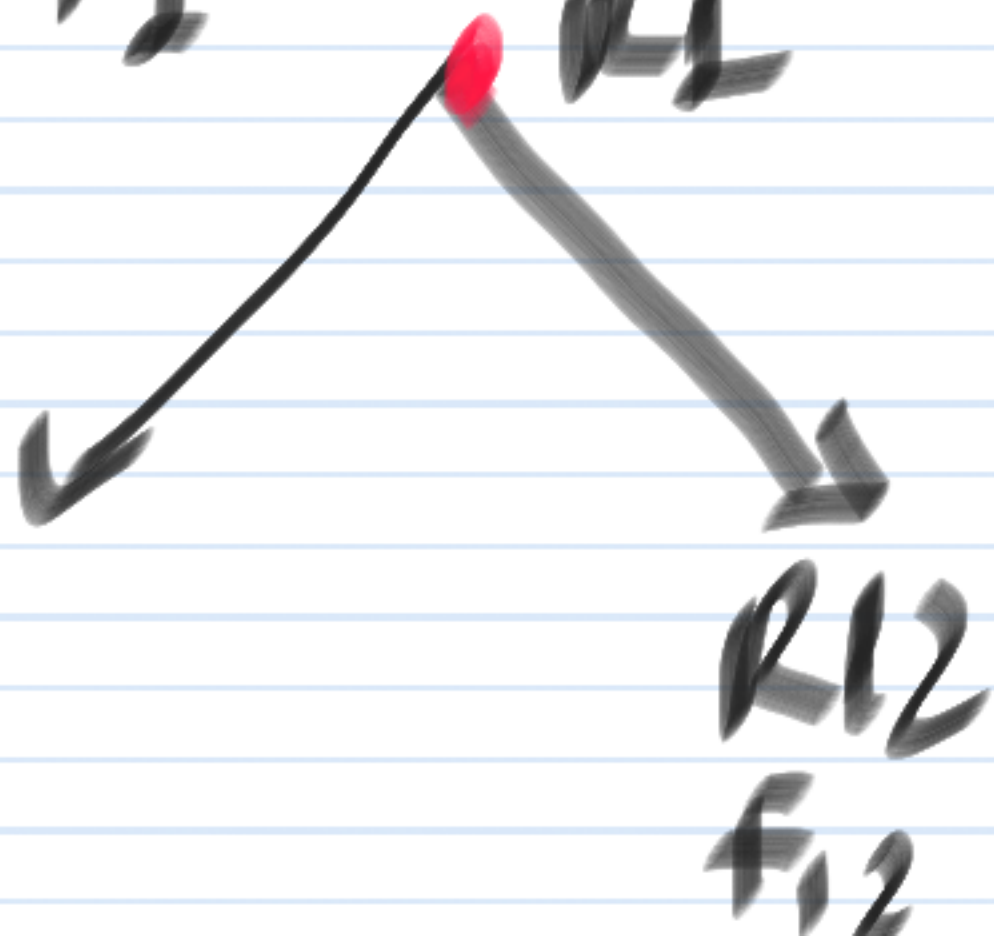
$\times : \subseteq \text{Cân Chín}$

$R_1(X, Y)$

$R_2(X, (R - X, Y))$

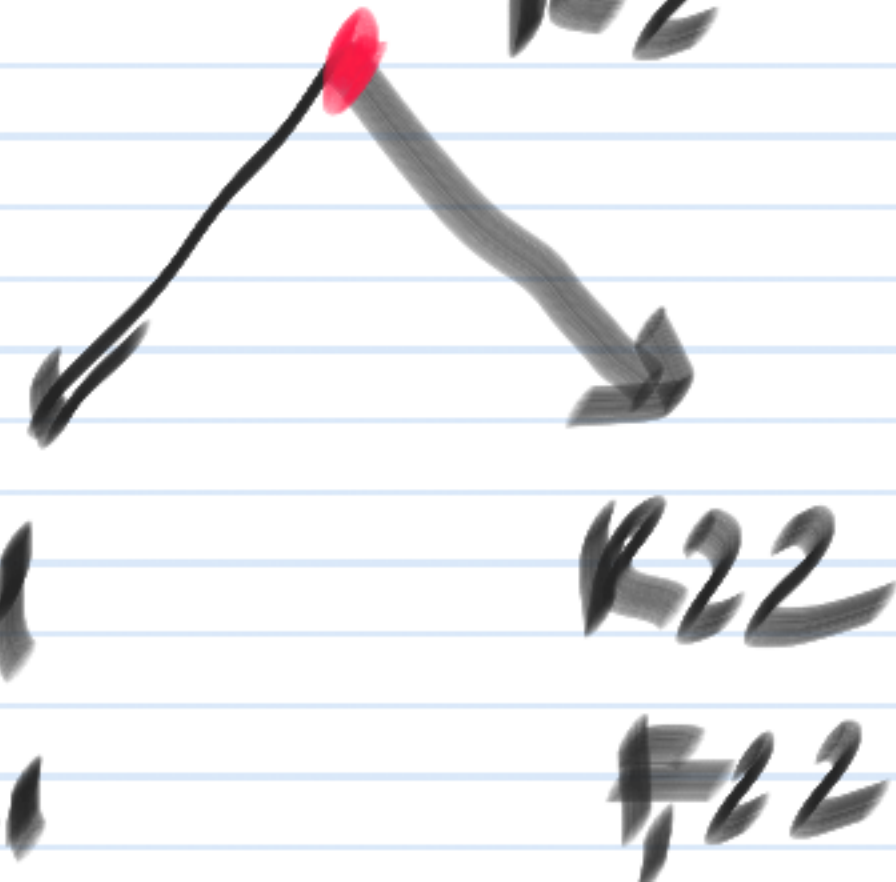
$F_1 = \pi_{R_1}(F)$

$F_2 = \pi_{R_2}(F)$



R_{11}
 F_{11}

R_{12}
 F_{12}



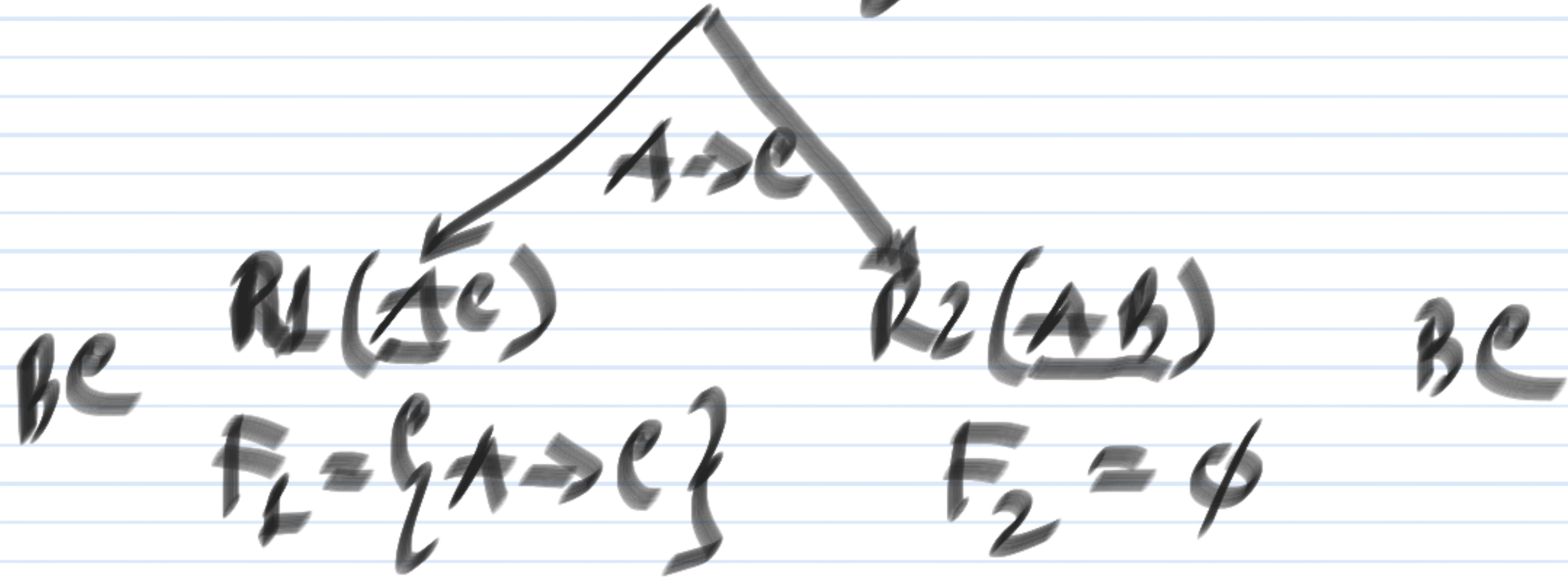
R_{21}
 F_{21}

R_{22}
 F_{22}

$R(\underline{A}Bc)$

$F = \{A \rightarrow c\}$

1NF



Kg:

$R_1(\underline{A}c)$

$F_1 = \{A \rightarrow c\}$

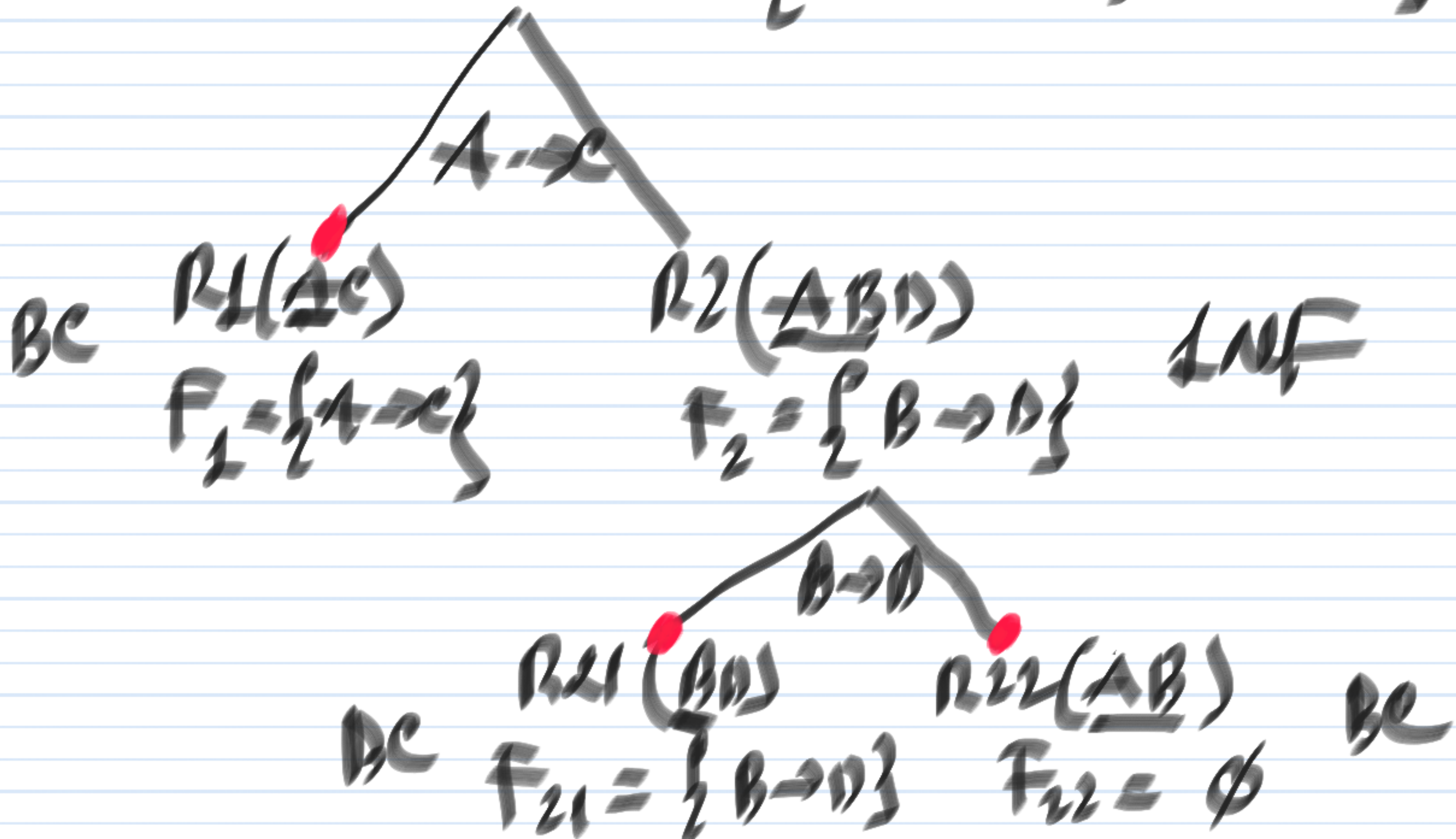
BC

$R_2(\underline{A}B)$

$F_2 = \emptyset$

BC

$R(\underline{A} B C D) \quad F = \{ A \rightarrow C, B \rightarrow D \}$



K_q:

$$R_1(\Delta c) \quad F_1 = \{A \rightarrow c\}$$

$$R_2(\Delta D) \quad F_2 = \{B \rightarrow D\}$$

$$R_3(\Delta D) \quad F_3 = \emptyset$$

SAD
A1

Systems Analysis Design

$R(ABCDE), F = \{ AB \rightarrow C, B \rightarrow A, D \rightarrow A \}$

$R(\underline{A}BCDE)$ 1NF

$BCDE \neq ABC$
A

3NF

$R_1(\underline{A}BC)$
 $F_1 = \{ \underline{A}B \rightarrow C, B \rightarrow A \}$

$R_2(\underline{A}BDE)$

1NF

$F_2 = \{ B \rightarrow A, D \rightarrow A \}$

BC

$R_{11}(\underline{A}B)$
 $F_{11} = \{ B \rightarrow A \}$

$R_{12}(\underline{BC})$
 $F_{12} = \emptyset$

$R_{21}(\underline{A}D)$
 $F_{21} = \{ D \rightarrow A \}$

$R_{22}(\underline{BDE})$
 $F_{22} = \emptyset$