

SID	Ph no	FID
1	n_1	f_1
1	n_2	f_1
1	n_3	f_1
2	n_1	f_2
2	n_2	f_2
1	n_3	f_2

$m \times n$

SID = 1

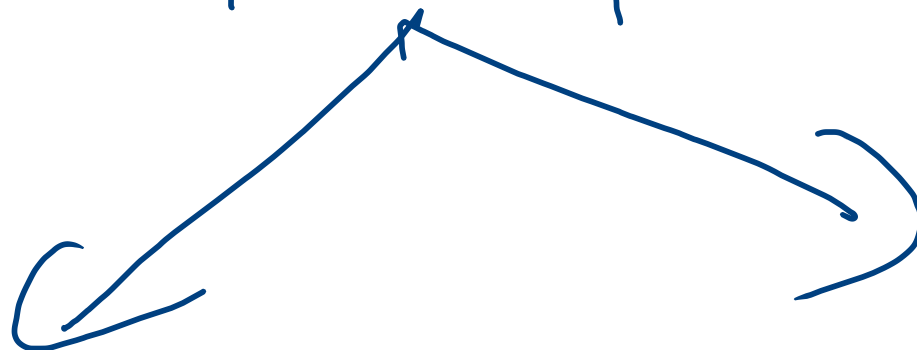
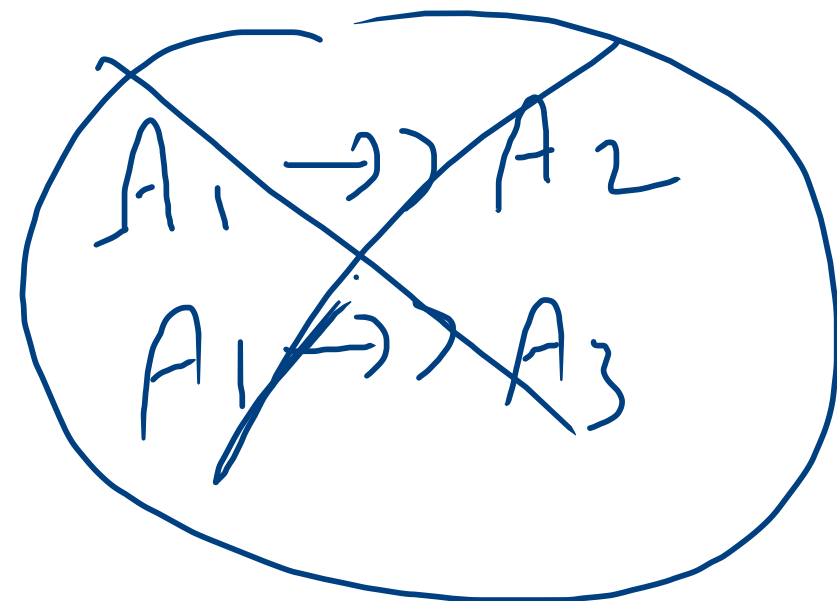
SID	Ph no
1	n_1
1	n_2
1	n_3

m

SID	FID
1	f_1
1	f_2

n

A_1	A_2	A_3
1	a_{21}	a_{31}
1	a_{22}	a_{32}
1	a_{21}	a_{32}
1	a_{22}	a_{31}



A_1	A_2
1	a_{21}
1	a_{22}

A_1	A_3
1	a_{32}
1	a_{31}

$A \rightarrow B$ ✓

$A, B \rightarrow C$

✓ ✓ $A \rightarrow B, C$ \Rightarrow

$A,$

$B_1 C_1$	$B_1 C_2$
$B_2 C_1$	$B_2 C_2$

$A \rightarrow B, C$

$A \rightarrow B$
 $A \rightarrow C$

$t[A_i] = t[A_i]$

$\Rightarrow t[B_i C_i] = t[B_i C_i]$

$A, B \rightarrow C$
independent

$A, B \rightarrow D$ 2×2

A	B	C	D
a_1	b_1	c_1	d_1
a_1	b_1	c_2	d_2
a_1	b_1	c_1	d_2
a_1	b_1	c_2	d_1
a_1	b_2	c_3	d_3

SID RRID ~~FRID~~ CRID

SID \rightarrow CRID ✓ X

SID, RRID \rightarrow CRID ✓ ✓

$$\overset{A}{\text{SID, (, D)}} \rightarrow \overset{B}{M}$$

$$R_1(\text{SID, (, D, M})$$

$$R_2(\text{SID, (, D, M})$$

$$\text{SID, (} \rightarrow \text{D} \Rightarrow \text{SID, (} \rightarrow \text{D}$$

$$R_{11}(\text{SID, (, D})$$

$$R_{12}(\text{SID, (, M})$$

~~$$R_{21}(\text{SID, (, D})$$~~

$$R_{22}(\text{SID, (, M})$$

select $A_1.SID$

from $Apply$ as A_1 , $Apply$ as A_2

where

$A_1.major = 'ee'$

and $A_2.major < > 's'$

and $A_1.SID = A_2.SID$

ce $mech$

ee cs

S

S ₁	8
S ₂	7

$$\frac{8+7}{2}$$

//

A

S ₁	C ₁	ee
S ₁	C ₂	ee

S ₁	C ₃	ee
----------------	----------------	----

S ₂	C ₁	ee
S ₂	C ₂	ee

8
8
8
7
7

Avg
→

$$\frac{3 \times 8 + 2 \times 7}{5}$$

$$\sum$$

s_1	8
s_2	7
s_3	8

$$\frac{8+7+8}{3}$$

~~///~~

s_1	c_1	ee
s_2	c_2	ee
s_3	c_1	ee

8
7

\Rightarrow

$$\frac{8+7}{2}$$