

I Mo Danthuluru declare that I have completed this assignment completely and entirely on my own, without any consultation with others. I understand that any breach of the UAB Academic Honor Code may result in severe penalties.

[Q1: 5pts]

Answer: The schema of result relation is as follows:

B	C	A	D
4	3	6	9
5	1	3	6

[Q2: 5pts]

Answer: The schema of result relation is as follows:

A	B	C	D
10	t	8	9

[Q3: 5pts]

Answer:

Value range of t,

$$t = 0 - (r * s - 1)$$

$t = r$ on $R \text{ NATURALJOIN } R$

[Q4: 5pts]

Answer: The schema of the result relation is,

B	A
2	1
2	4
5	4
5	2

[Q5: 12 pts]

Answer:

Union:

A	B	C
a	b	c
d	b	c
d	e	f
b	e	c
a	b	f
b	e	d

Intersection:

A	B	C
a	b	c
d	e	f
b	e	c

R-S:

A	B	C
d	c	c
a	b	f

S-R:

A	B	C
b	e	d