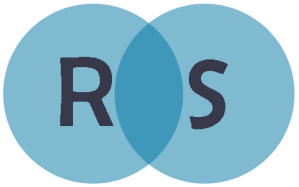
1. Union of R and S



r,s must have the same number of attributes

- Example: given the relations r and s

r

A	B
α	1
α	2
β	1

s

A	B
α	2
β	3

$r \cup s$

A	B
α	1
α	2
β	1
β	3

2. it's a natural join between R and S, connecting the two relation.

RS := R ⋈ S It merges the two tubles together in a new tuble, should R have an addtional attribute that S doesn't not, it will be in the new tuple.

EXAMPLE:

A	B	C	D
α	1	α	a
β	2	γ	a
γ	4	β	b
α	1	γ	a
δ	2	β	b

r

B	D	E
1	a	α
3	a	β
1	a	γ
2	b	δ
3	b	ε

s

=

A	B	C	D	E
α	1	α	a	α
α	1	α	a	γ
α	1	γ	a	α
α	1	γ	a	γ
δ	2	β	b	δ

3. selecting a tuple c in (R) and combining/merging

It's selecting **C** from (R) and everything in C into a new tuple.

Relations *r*, *s*:

A	B
α	1
β	2

r

C	D	E
α	10	a
β	10	a
β	20	b
γ	10	b

s

This is an example: I couldn't make much sense out of the question, Whats the attributes names, is it m and n? maximum and minimum.. I need more informatio in order to "visualize" the tuples.. I can't make out what R and C holds for values.. here's how it would look like for r x s.

But in this case we're performing selection on set R of C, together with everything in set S

r x *s*:

A	B	C	D	E
α	1	α	10	a
α	1	β	10	a
α	1	β	20	b
α	1	γ	10	b
β	2	α	10	a
β	2	β	10	a
β	2	β	20	b
β	2	γ	10	b

4. The result of set difference operation is tuples, which are present in one relation but are not in the second relation.

it's performing project, selecting L on R and from that it's finding the values which are not present in S.

Suppose R = {1, 2, 3, 4, 5}

S = {2, 4, 5}

RS = {1, 3}