

Relational Algebra Operators

* Set union	UNION	\cup
* Set difference	$-$	$-$
Set intersection	INTERSECT	\cap
* Projection	Project	π
* Selection	Select	σ
* Rename	$\tau_r(A_1, \dots, A_n) = R$	
* Cartesian product	\times	*
Join	JOIN_C	\bowtie_C
Natural Join	*	*

R

A	B
a1	b1
a2	b2

S

C	D
c1	d1
c2	d2

R * S

A	B	C	D
a1	b1	c1	d1
a1	b1	c2	d2
a2	b2	c1	d1
a2	b2	c2	d2

R

A	B
a1	b1
a2	b2
a4	b4

S

A	C	D
a1	c1	d1
a3	c2	d2
a2	c3	d3

R * S

A	B	C	D
a1	b1	c1	d1
a2	b2	c3	d3

R

A	B
a1	b1
a2	b2

S

A	B
a3	b3
a2	b5
a2	b2

R * S

A	B
a2	b2

Show Name	Start Year	Creator	Stream Site	URL	Show Seasons	Stream Seasons
The Wire	2002	Simon	HBO	hbo.com	1-5	1-5
Babylon 5	1993	Straczynski	Prime	es.com	1-5	1-5
Never Have I Ever	2020	Kelley	Netflix	netflix.com	1-2	1-2
Babylon 5	1993	Straczynski	Hulu	hulu.com	1-5	1-5
The Wire	2002	Simon	Prime	es.com	1-5	1-1
Jeopardy	1980	A	netflix	netflix.com	1-26	1-10