

# 01 – Union / union all

# union/union all: Union combines the results of queries into a single result

## Types

- `union all`: include all records (i.e. include duplicates)
- `union`: exclude duplicates

## Rules

- Number and order of fields **must** be the same in queries
- Data types across fields **must** be compatible

### union all

```
select 'Jane' val
union all
select 'Sally'
union all
select 'Jon'
union all
select 'Don'
union all
select 'Jane'
;
```

	val
1	Jane
2	Sally
3	Jon
4	Don
5	Jane

```
select *
from shapeArea
```

```
union all
```

```
select 'square', 9
;
```

	shape	area
1	circle	33.5700
2	triangle	12.5400
3	square	9.0000

```
select
  cv.redRGB R
  , cv.greenRGB G
  , cv.blueRGB B
from colorValue cv
where cv.color = 'blue'
```

	R	G	B
1	189	215	238
2	0	176	240
3	189	215	238

```
union all
```

```
select 0, 176, 240
```

```
union all
```

```
select 189, 215, 238;
```

### union

```
select 'Jane' val
union
select 'Sally'
union
select 'Jon'
union
select 'Don'
union
select 'Jane'
;
```

	val
1	Jane
2	Sally
3	Jon
4	Don

```
select *
from shapeArea
```

```
union
```

```
select 'square', 9
;
```

	shape	area
1	circle	33.5700
2	triangle	12.5400
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```
select
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  , cv.greenRGB G
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from colorValue cv
where cv.color = 'blue'
```

	R	G	B
1	0	176	240
2	189	215	238

```
union
```

```
select 0, 176, 240
```

```
union
```

```
select 189, 215, 238;
```