JOINING DATA IN R WITH DPLYR

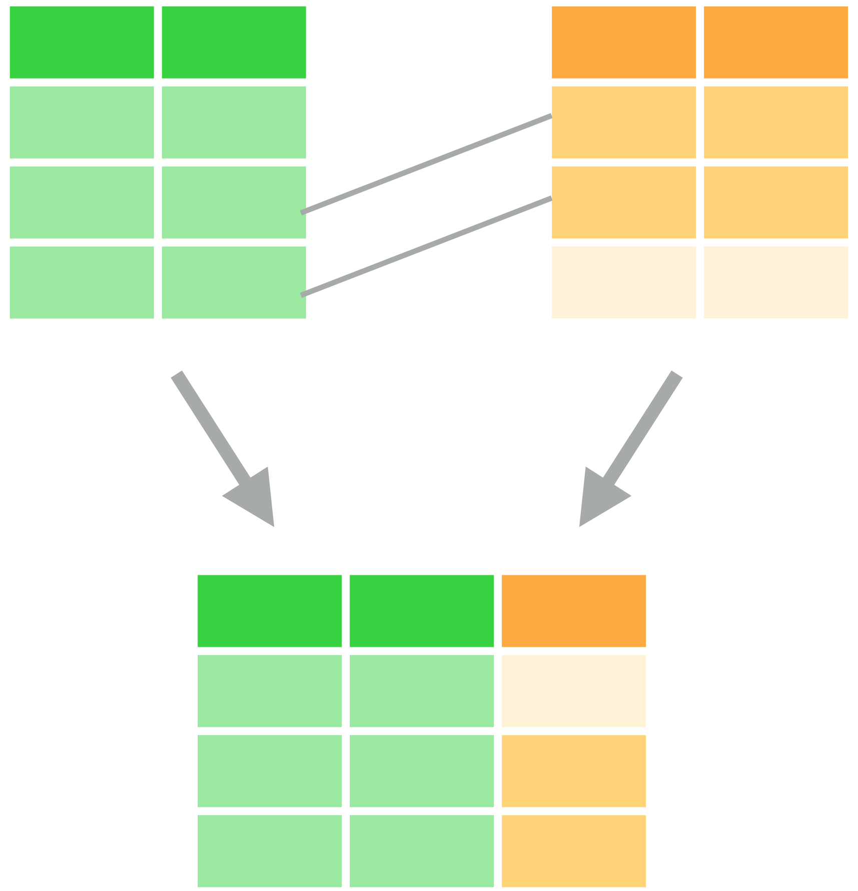
Filtering joins

filter()

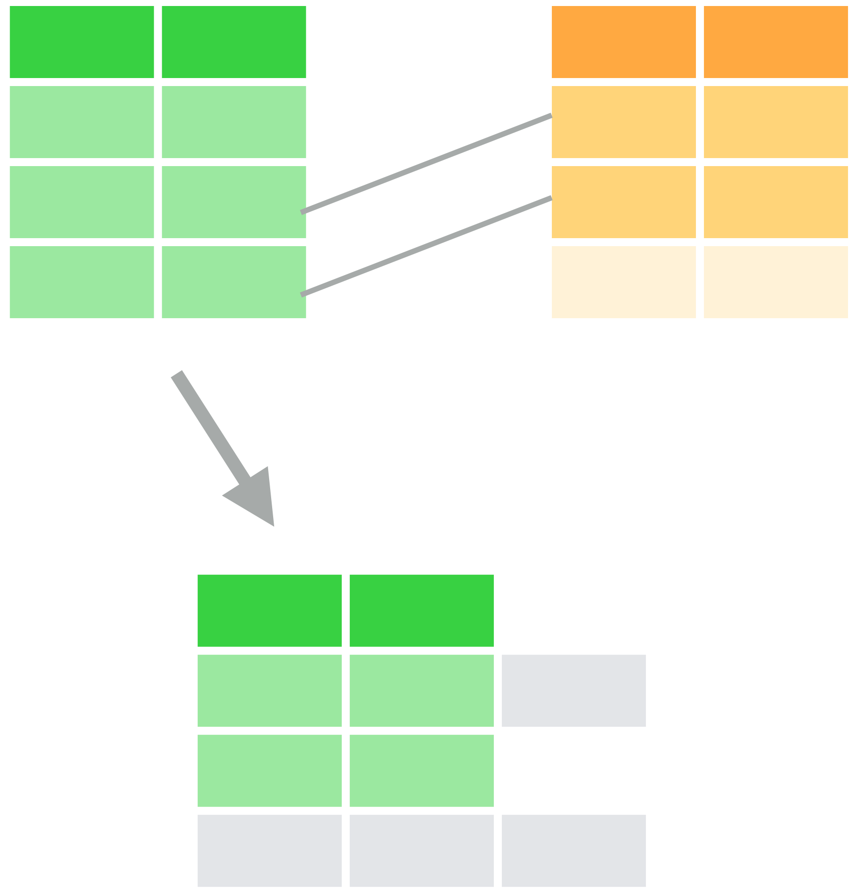
```
> pressure[1:4, ]
  temperature pressure
1           0   0.0002
2          20   0.0012
3          40   0.0060
4          60   0.0300
```

```
> filter(pressure[1:4, ], temperature %in% c(20, 30, 50, 60))
  temperature pressure
1          20   0.0012
2          60   0.0300
```

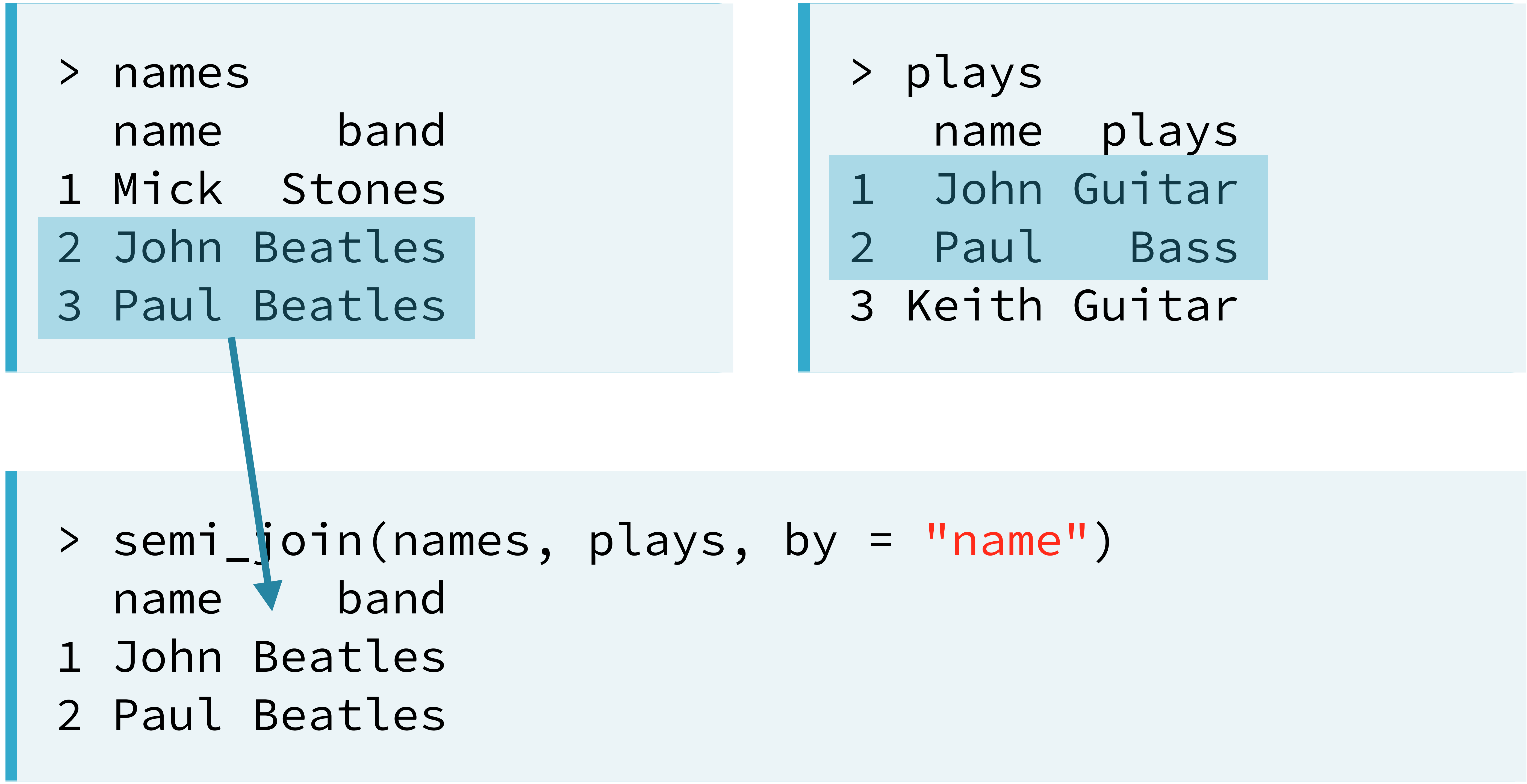
- Mutating joins



- Filtering joins



semi_join()



```
> names
   name    band
1  Mick  Stones
2  John Beatles
3  Paul Beatles
```

```
> plays
    name  plays
1   John Guitar
2   Paul   Bass
3  Keith Guitar
```

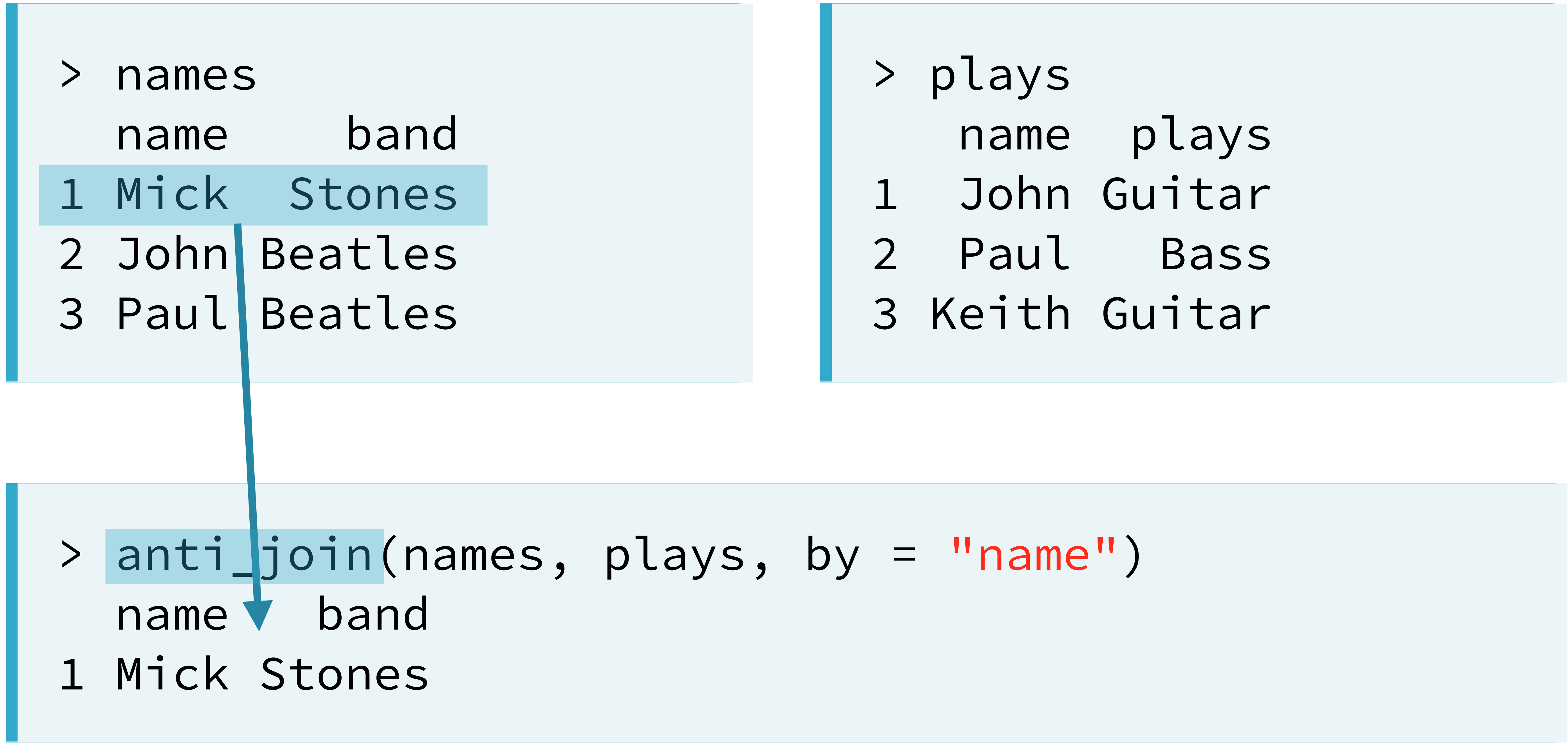
```
> semi_join(names, plays, by = "name")
   name    band
1  John Beatles
2  Paul Beatles
```

Let’s practice!

JOINING DATA IN R WITH DPLYR

Anti-joins

anti_join()



```
> names
   name    band
1  Mick  Stones
2  John Beatles
3  Paul Beatles
```

```
> plays
    name  plays
1   John Guitar
2   Paul   Bass
3  Keith Guitar
```

```
> anti_join(names, plays, by = "name")
   name   band
1  Mick Stones
```

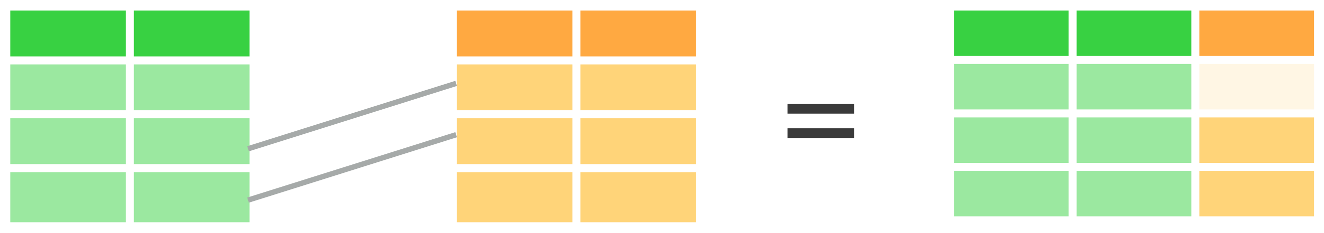
anti_join()

```
> names3
  name    band
1 Mick  Stones
2 Jonn Beatles
3 Paul Beatles
```

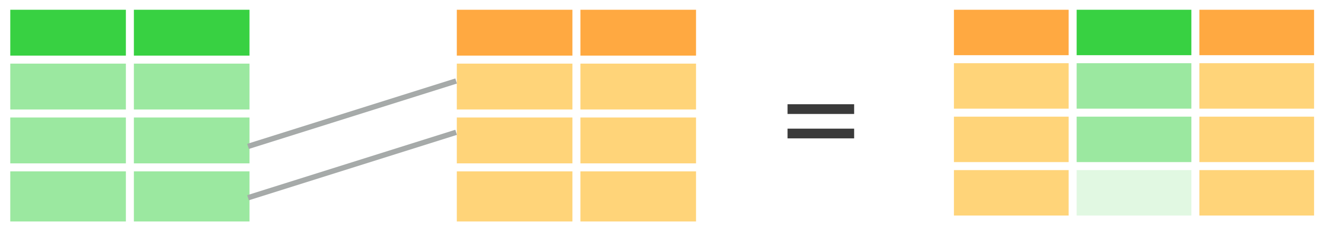
```
> plays
   name  plays
1  John Guitar
2  Paul   Bass
3 Keith Guitar
```

```
> anti_join(names3, plays, by = "name")
  name    band
1 Jonn Beatles
2 Mick  Stones
```

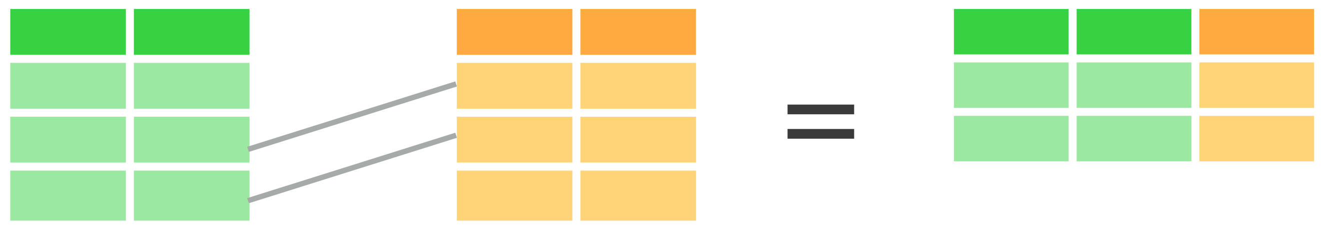
- `left_join()`



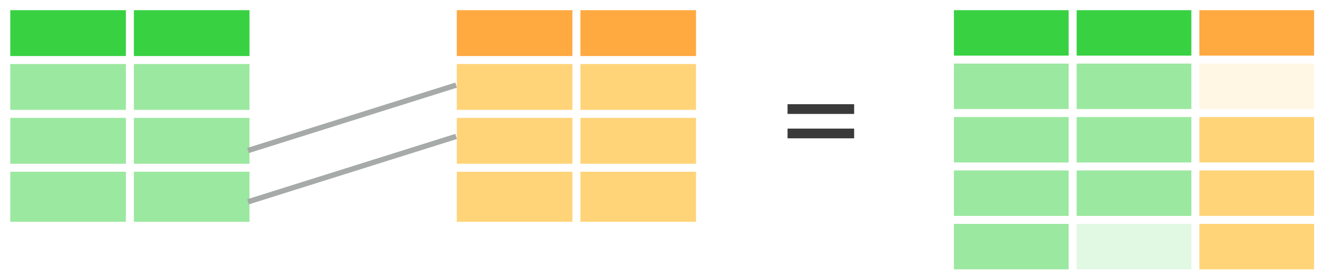
- `right_join()`



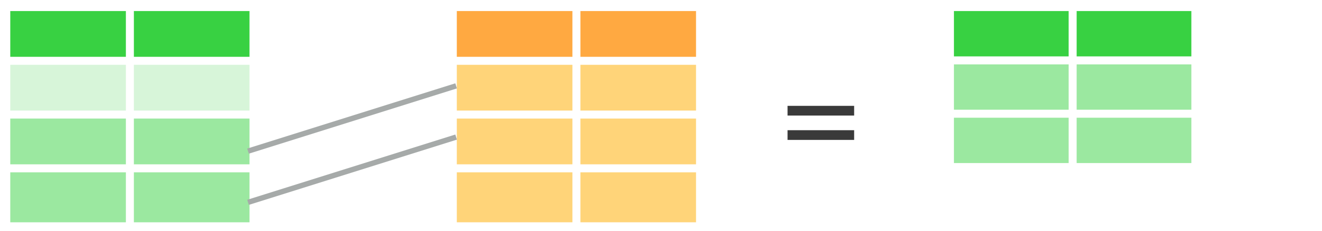
- `inner_join()`



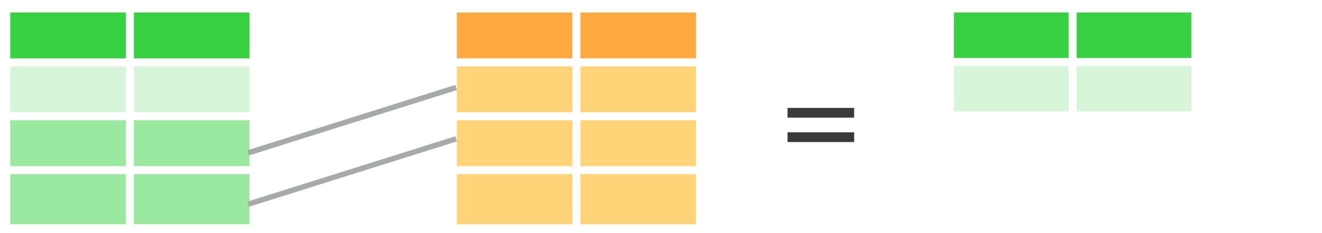
- `full_join()`



- `semi_join()`



- `anti_join()`



JOINING DATA IN R WITH DPLYR

Let’s practice!

JOINING DATA IN R WITH DPLYR

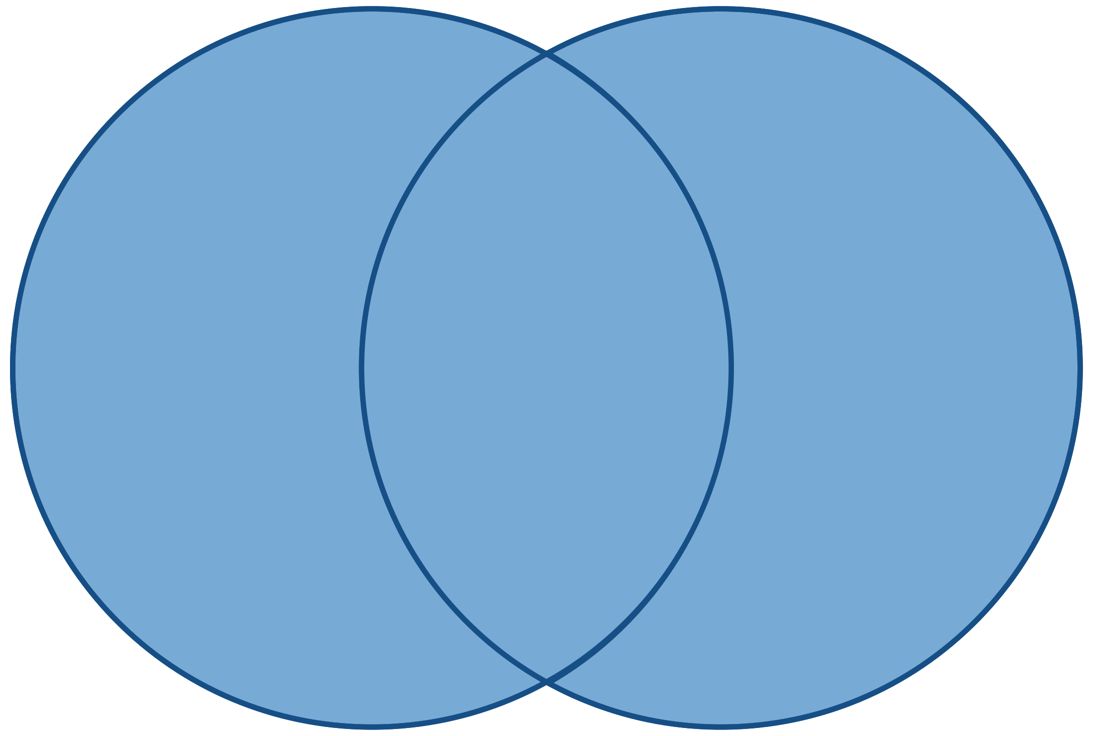
Set operations

```
> names
  name    band
1 Mick  Stones
2 John Beatles
3 Paul Beatles
```

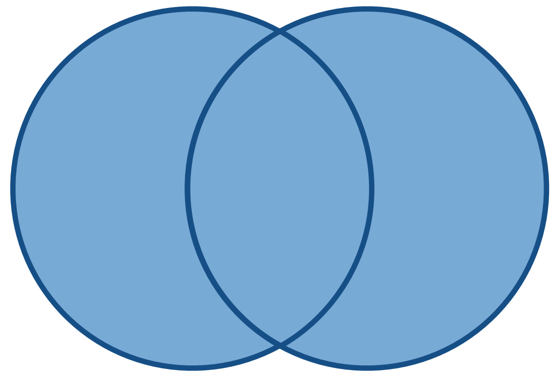
```
> more_names
   name    band
1 Keith  Stones
2  Mick  Stones
3  John Beatles
4  John Beatles
```

intersection

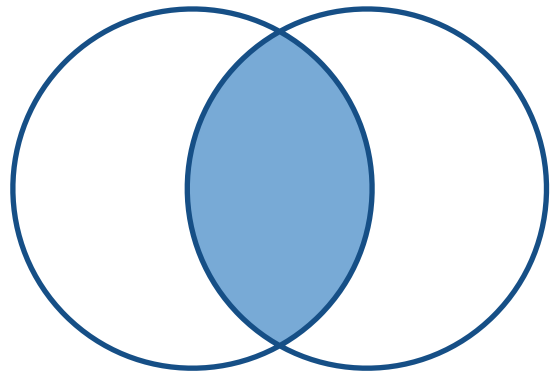
union



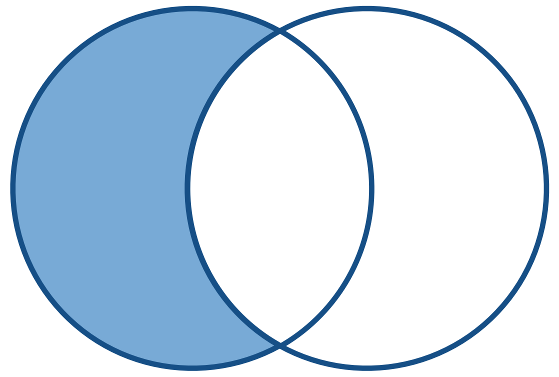
- `union()`



- `intersect()`



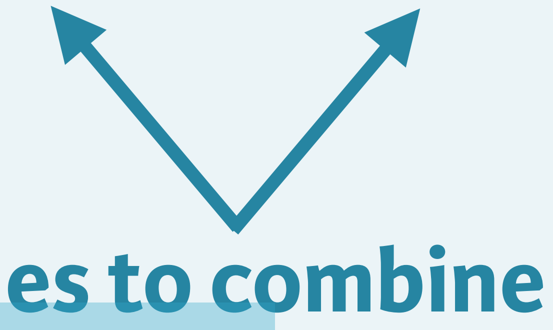
- `setdiff()`



```
> names
   name    band
1  Mick  Stones
2  John Beatles
3  Paul Beatles
```

```
> more_names
    name    band
1  Keith  Stones
2   Mick  Stones
3   John Beatles
4   John Beatles
```

```
> union(names, more_names)
```



tables to combine

```
> names
  name    band
1 Mick  Stones
2 John Beatles
3 Paul Beatles
```

```
> more_names
   name    band
1 Keith  Stones
2  Mick  Stones
3  John Beatles
4  John Beatles
```

```
> intersect(names, more_names)
  name    band
1 Mick  Stones
2 John Beatles
```

```
> names
  name    band
1 Mick  Stones
2 John Beatles
3 Paul Beatles
```

```
> more_names
   name    band
1 Keith  Stones
2  Mick  Stones
3  John Beatles
4  John Beatles
```

```
> setdiff(names, more_names)
  name    band
1 Paul Beatles
```

Let’s practice!

Comparing tables

```
> stones1
     name   band
1    Mick Stones
2   Keith Stones
3 Charlie Stones
4  Ronnie Stones
```

```
> stones2
     name   band
1    Mick Stones
2  Ronnie Stones
3   Keith Stones
4 Charlie Stones
```

```
> stones1
     name   band
1    Mick Stones
2   Keith Stones
3 Charlie Stones
4  Ronnie Stones
```

```
> stones2
     name   band
1    Mick Stones
2  Ronnie Stones
3   Keith Stones
4 Charlie Stones
```

```
> setequal(stones1, stones2)
```

tables to compare

Mutating joins

- `left_join(), right_join(), inner_join(), full_join()`

Filtering joins

- `semi_join(), anti_join()`

Set operations

- `union(), intersect(), setdiff()`

Comparisons

- `setequal()`

Let’s practice!