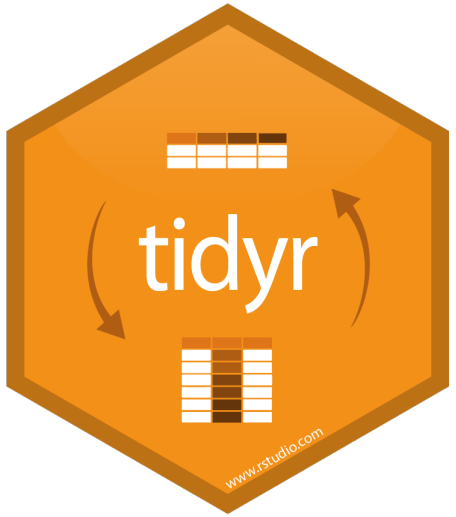
Data Verbs

Data verbs are functions that take one or more tabular datasets and return a new dataset. They are designed to always accept the dataset(s) as the first arguments to make them easy to use in pipes. Verbs correspond to a theoretical model called **relational algebra**, which describes for how transformations occur within a database.

Most verbs come from one of two R packages:



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Data Verbs

While there are dozens of verbs provided by these packages, most are just slight variations of each other. We will focus on learning **ten core verbs**, from which everything else is easily derived:

[one-table verbs]

- **filter()**
- **slice()**
- **select()**
- **arrange()**
- **mutate()**
- **summarize()**

[two-table verbs]

- **left_join()**
- **semi_join()**

[pivots]

- **pivot_wider()**
- **pivot_longer()**

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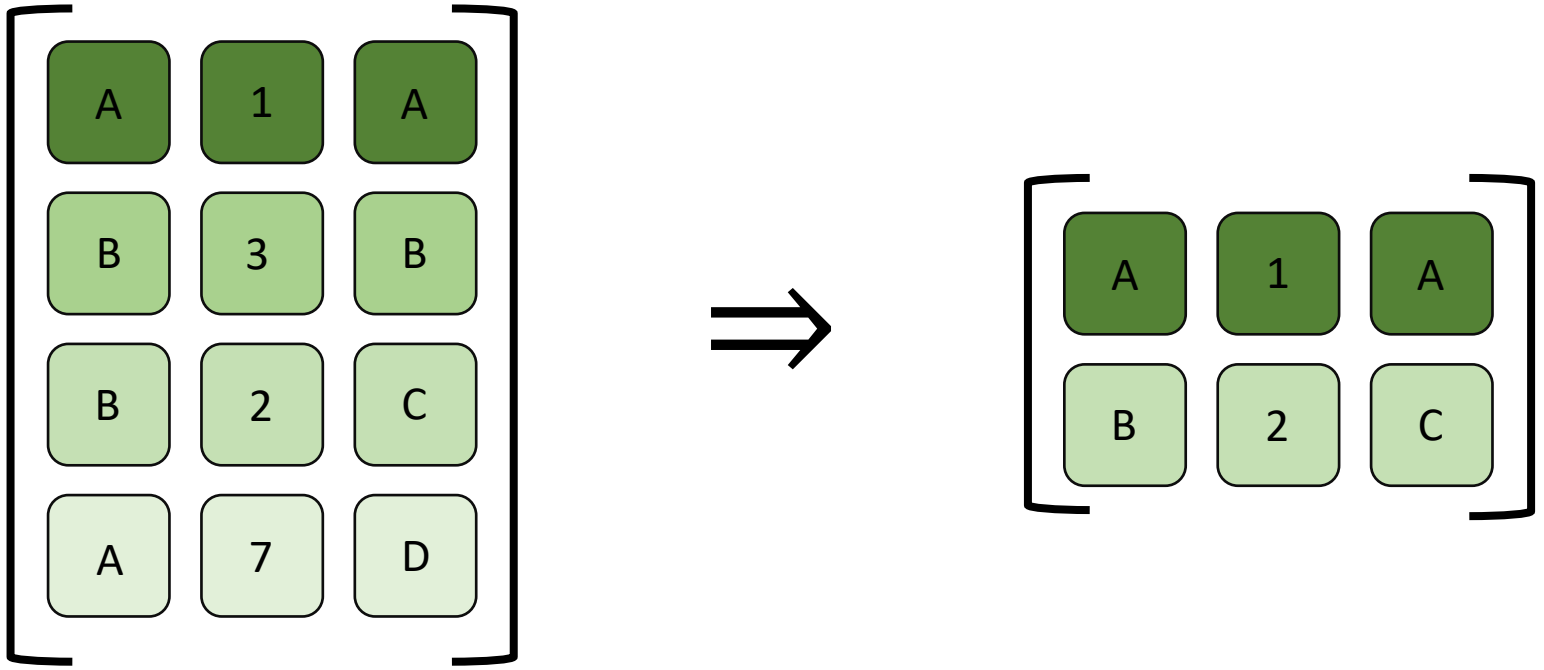
FILTER / SLICE



%in% **between()**

<, >, <=, >=, !=, ==

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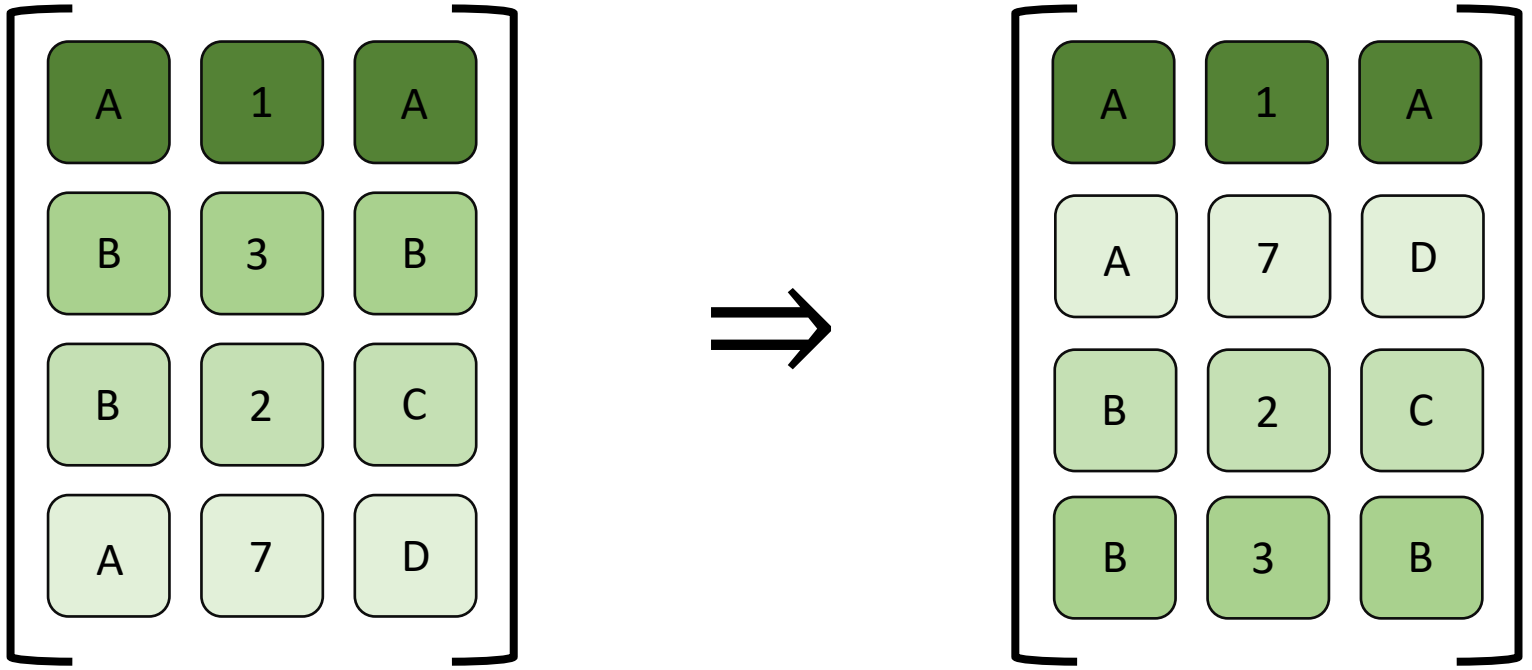
ARRANGE



desc()

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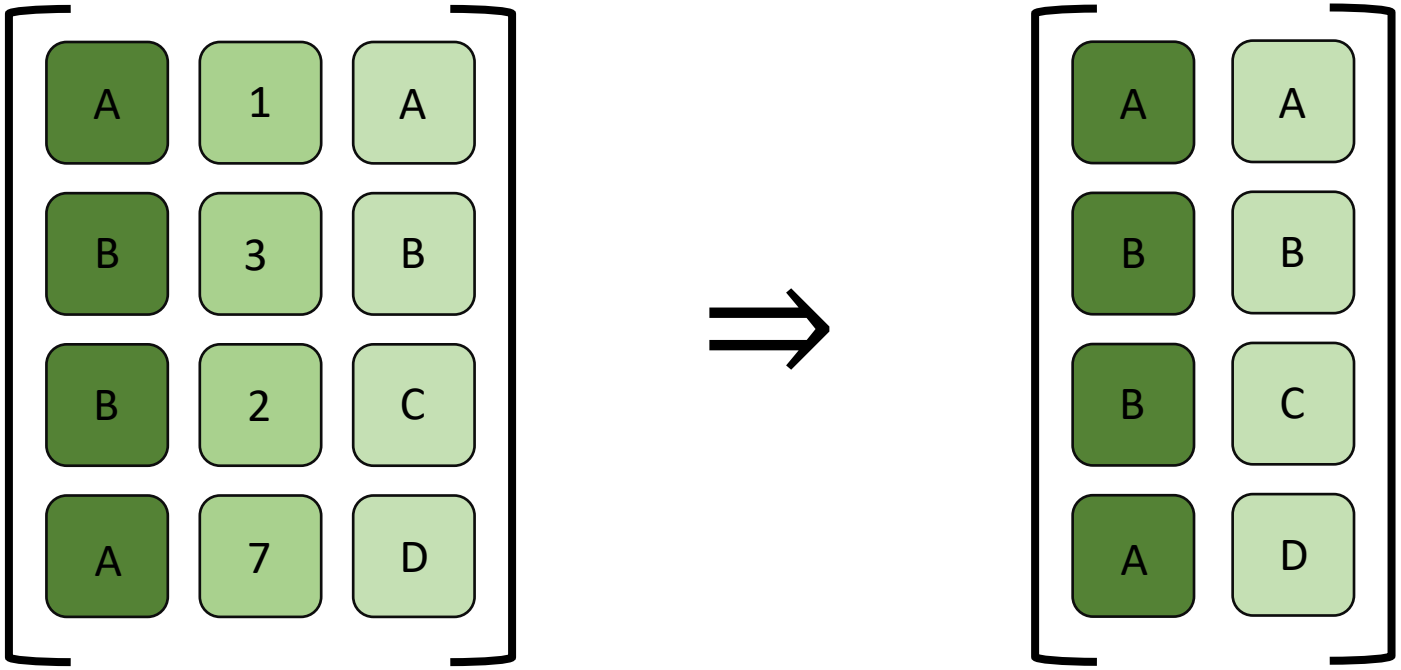
SELECT



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