

Signaling Principle

```
babynames %>%  
  group_by(name, sex) %>%  
  ungroup() %>%  
  summarise(total = sum(n)) %>%  
  arrange(desc(total))  
  
#           total  
# 1 340851912
```

*Use ungroup()
to...*



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Spatial Contiguity Principle

name	band
Mick	Stones
John	Beatles
Paul	Beatles

+

name	plays
John	guitar
Paul	bass
Keith	guitar

=

name	band	plays
Mick	Stones	<NA>
John	Beatles	guitar
Paul	Beatles	bass



name	band
Mick	Stones
John	Beatles
Paul	Beatles

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John	guitar
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Keith	guitar

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Mick	Stones	<NA>
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