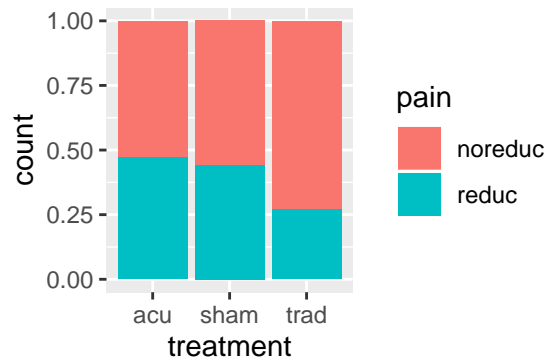


1. Let's say I survey the class and ask "Did you leave Reed College to travel during Fall Break". Out of 23 students, 14 of them or 60.8% said yes. Is this consistent with a claim that half of Reed students travel over fall break? Assume the data set is called `fallbreak` and the column is `travel`, which takes values `yes` and `no`.
  - (a) Please write the `infer` code that would test this claim.

- (b) Please write the `infer` code that compute a confidence interval for our statistic.

2. Consider the results from a randomized controlled trial conducted at Harvard regarding the effectiveness of three treatments (acupuncture, sham acupuncture, and traditional medicine (i.e. pain meds)) to reduce back backpain. The dataset is called `acu`.

```
##           treatment
## pain      acu sham trad
## noreduc  203  216  282
##  reduc   184  171  106
```



The scientists were interested in the question of whether these treatments had any effect on self-reported pain.

(a) Write out the null hypothesis corresponding to this question.

(b) Write out the `infer` code to generate the following plot.

