Multiple t-tests over columns

Asked 6 months ago Active 6 months ago Viewed 23 times



I'm still very novice to R.



```
data.frame(treatment = c("D", "E", "F", "G"), group = c(rep(c("A", "B"), each = 4)), effect = c(1, 4, 5, 6, 8, 9, 10, 11))
```



treatment group effect



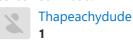
For every entry in treatment I'd like to use the t-test to see whether there was a statistically significant difference in effect for the two groups.

Many thanks!

```
r lapply t-test Edit tags
```

Share Edit Follow Close Flag

asked Feb 27 at 0:44



You only have one observation for each effect for a given treatment. Can't do a t.test with that data. Am I missing something? – George Feb 27 at 1:34

1 Answer





Using by .

```
0
```

sample estimates:

```
# mean in group A mean in group B
# 4.333333 10.333333
# -----
#
  d$treatment: B
#
# Welch Two Sample t-test
#
# data: effect by group
# t = -3.1623, df = 3.4483, p-value = 0.04191
\# alternative hypothesis: true difference in means is not equal to \emptyset
# 95 percent confidence interval:
# -6.4542173 -0.2124494
# sample estimates:
# mean in group A mean in group B
# 4.000000
            7.333333
```

Data:

I made new example data since yours appears to be flawed.

```
d <- structure(list(treatment = c("A", "B", "A", "B", "A", "B", "A",</pre>
group = 2L, id = 3L), dimnames = list(treatment = c("treatment=A",
"treatment=B"), group = c("group=A", "group=B"), id = c("id=1", "id=2", "id=3"))), row.names = c(NA, -12L), class = "data.frame")
d
#
    treatment group effect
# 1
       Α
               Α
# 2
               Α
# 3
          Α
              В
# 4
          В
               В
# 5
          Α
               Α
# 6
         В
               Α
# 7
         Α
              В
# 8
         В
               В
                     6
# 9
          Α
               Α
                    10
# 10
         В
              Α
                     3
# 11
          Α
              В
                    11
# 12
          В
                В
                     7
```

Share Edit Follow Flag

answered Feb 27 at 6:27

iay.sf

35.1k 5 41 80