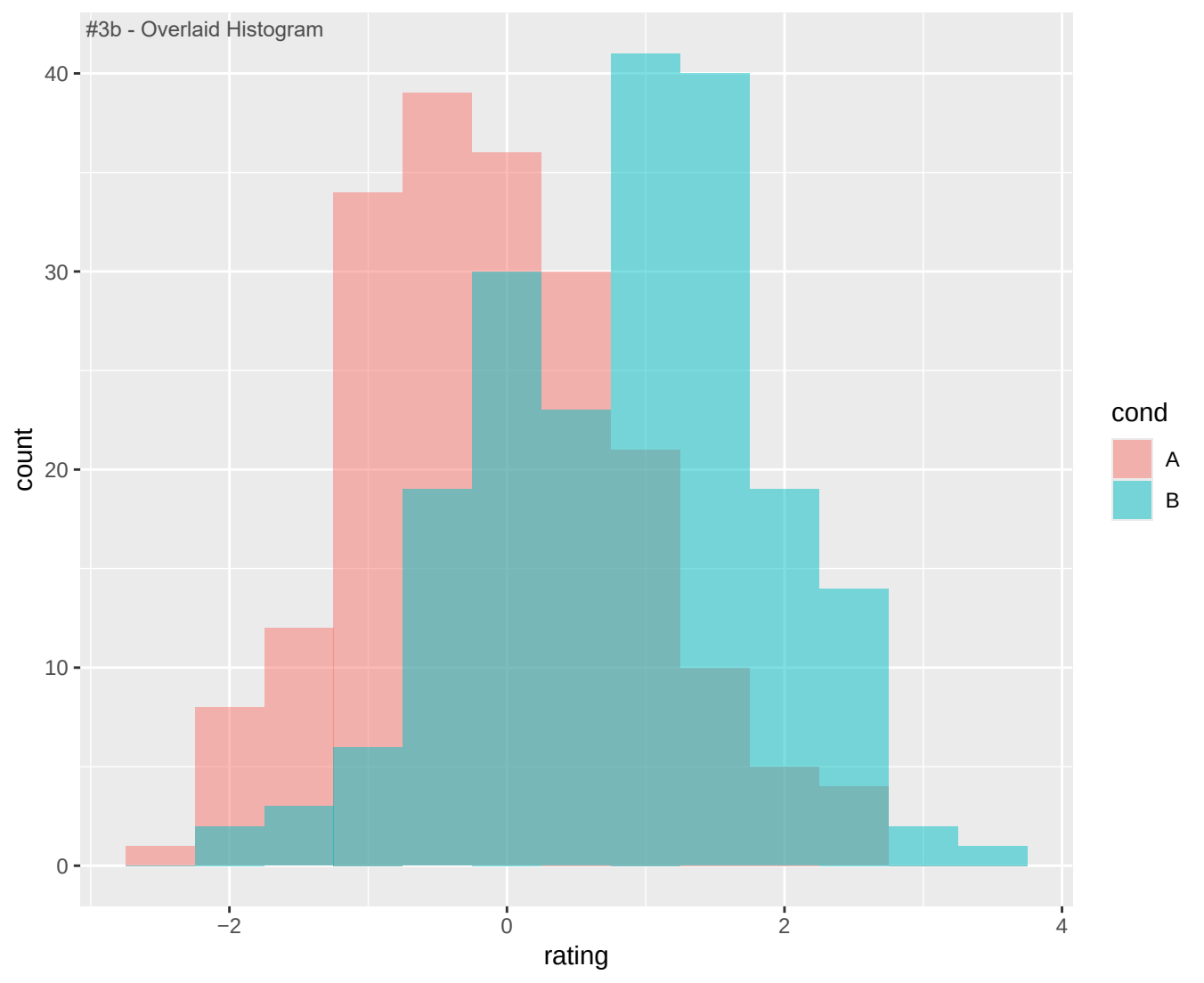
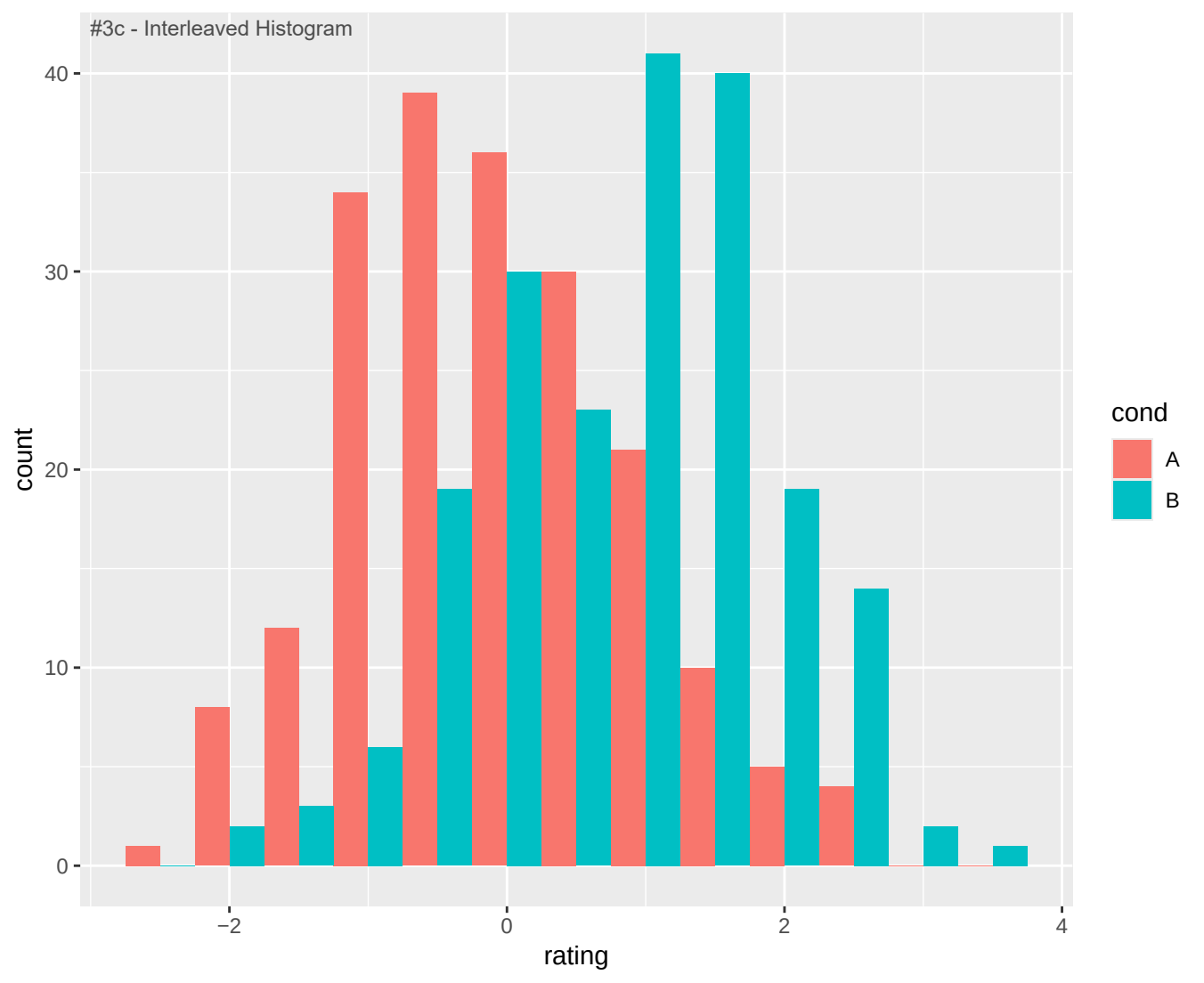
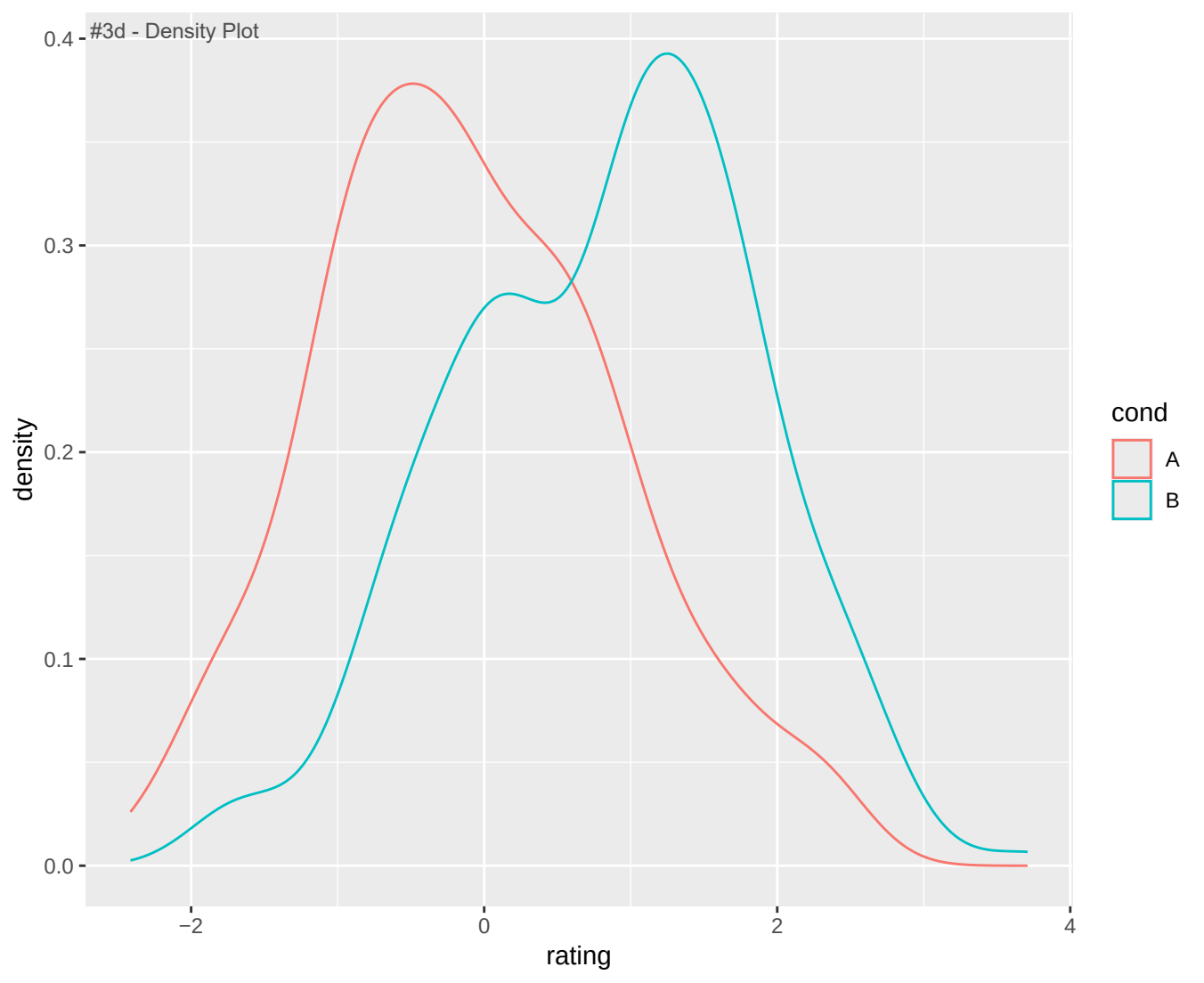
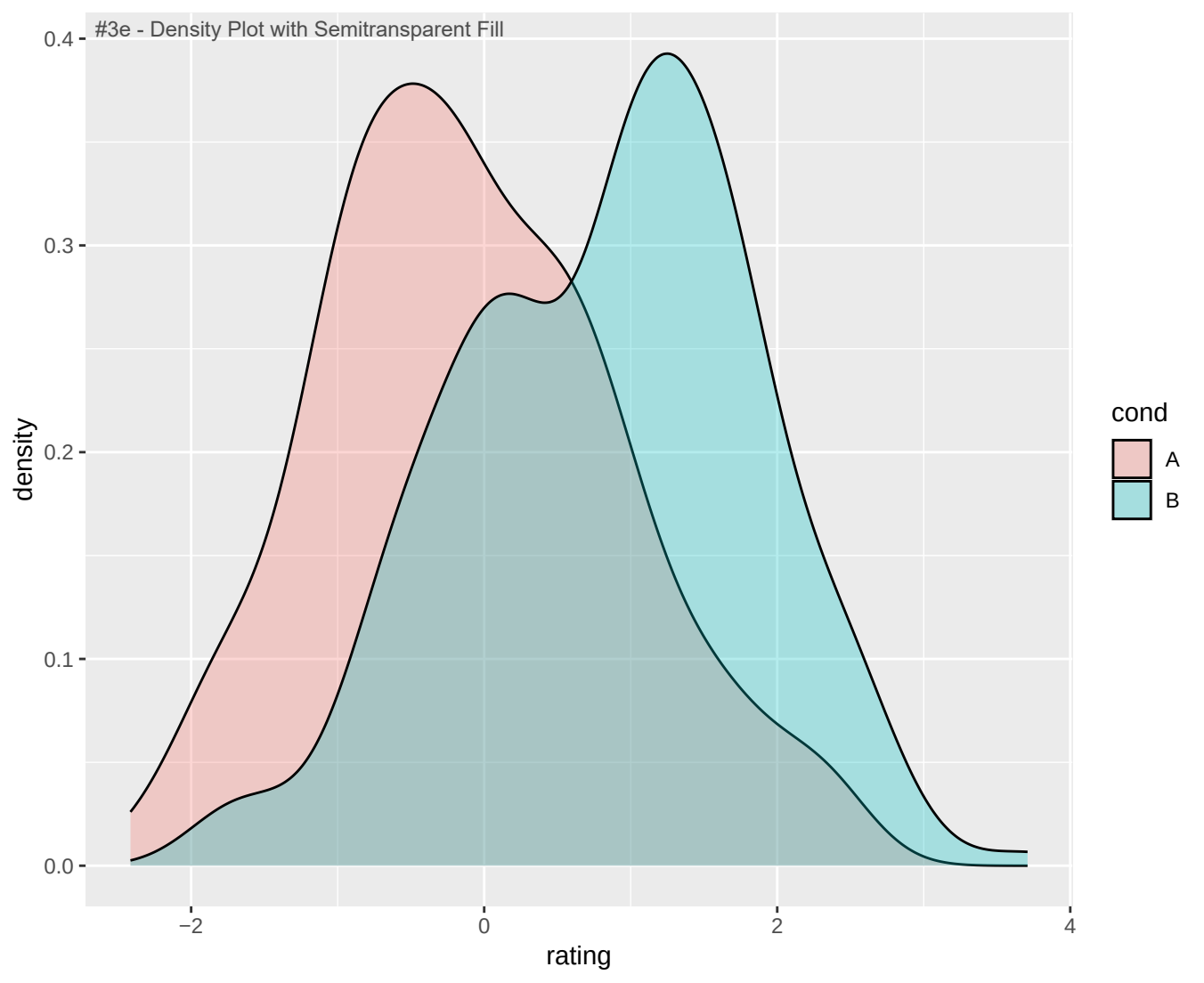

#3b - Overlaid Histogram
40
30
20
10
0
count
−2
0
2
4
rating
cond
A
B


#3c - Interleaved Histogram
count
40
30
20
10
0
−2
0
2
4
rating
cond
A
B


#3d - Density Plot
0.4
0.3
0.2
0.1
0.0
density
−2
0
2
4
rating
cond
A
B


#3e - Density Plot with Semitransparent Fill
0.4
0.3
0.2
0.1
0.0
density
−2
0
2
4
rating
cond
A
B

```{r}
library(ggplot2)
#3.(a) #dat data file
dat <- data.frame(cond = factor(rep(c("A", "B"), each = 200)), rating = c(rnorm(200), rnorm(200, mean = .8)))
#3.(b) Overlaid histogram - shows both conditions together and where the counts overlap
ggplot(dat, aes(x = rating, fill = cond)) + geom_histogram(binwidth = .5, alpha = .5, position = "identity")
#3.(c) Interleaved histogram - shows both conditions but now has them separate to see how the counts compare
ggplot(dat, aes(x = rating, fill = cond)) + geom_histogram(binwidth = .5, position = "dodge")
#3.(d) Density plots - similar to the histogram but it in a smooth curve rather than bars
ggplot(dat, aes(x = rating, colour = cond)) + geom_density()
#3.(e) Density plot with semitransparent fill - has the smooth curve as the density plot but now each condition is filled in by color so you can better see where they overlap
ggplot(dat, aes(x = rating, fill = cond)) + geom_density(alpha = .3)
```