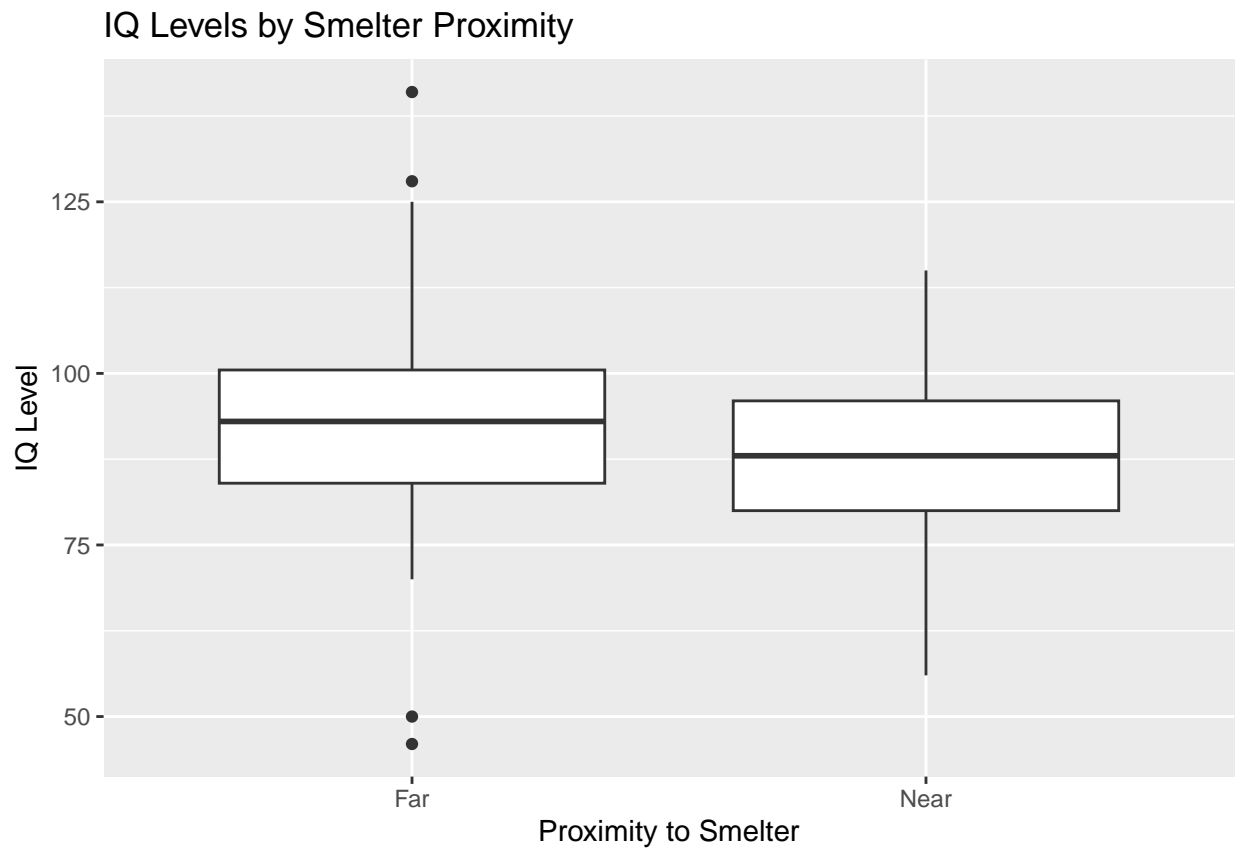


```
library(ggplot2)
library(knitr)
lead_data <- read.csv("/Users/Huangtao/Desktop/lead-iq-01.csv")
lead_data$IQ[lead_data$IQ == 999] <- 99

ggplot(lead_data, aes(x=Smelter, y=IQ)) +
  geom_boxplot() +
  labs(title = "IQ Levels by Smelter Proximity",
       x = "Proximity to Smelter",
       y = "IQ Level")
```



```
kable(lead_data[1:10,], caption = "Sample IQ Data")
```

Table 1: Sample IQ Data

Smelter	IQ
Far	70
Far	85
Far	86
Far	76
Far	96
Far	94
Far	115

Smelter	IQ
Far	97
Far	128
Far	99

#Describe the graph and the table: The boxplot shows IQ levels for people living near and far from the smelter. After correcting an outlier, the IQ levels for both groups are quite similar with only a few outliers remaining. The table below shows the corrected IQ levels and proximity to the smelter for the first 10 people in the data.

#In-line calculations giving the values of the means

```
mean_near <- mean(lead_data$IQ[lead_data$Smelter == "Near"])
mean_far <- mean(lead_data$IQ[lead_data$Smelter == "Far"])
```

The average IQ for people near the smelter is 89.1929825, and for people far from the smelter is 92.6865672.