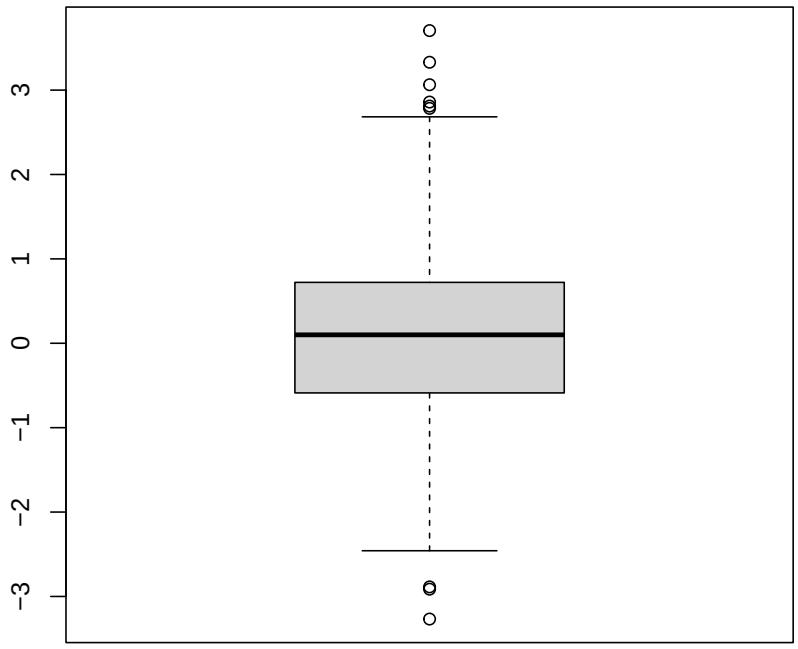
2022-11-02 19:57:21

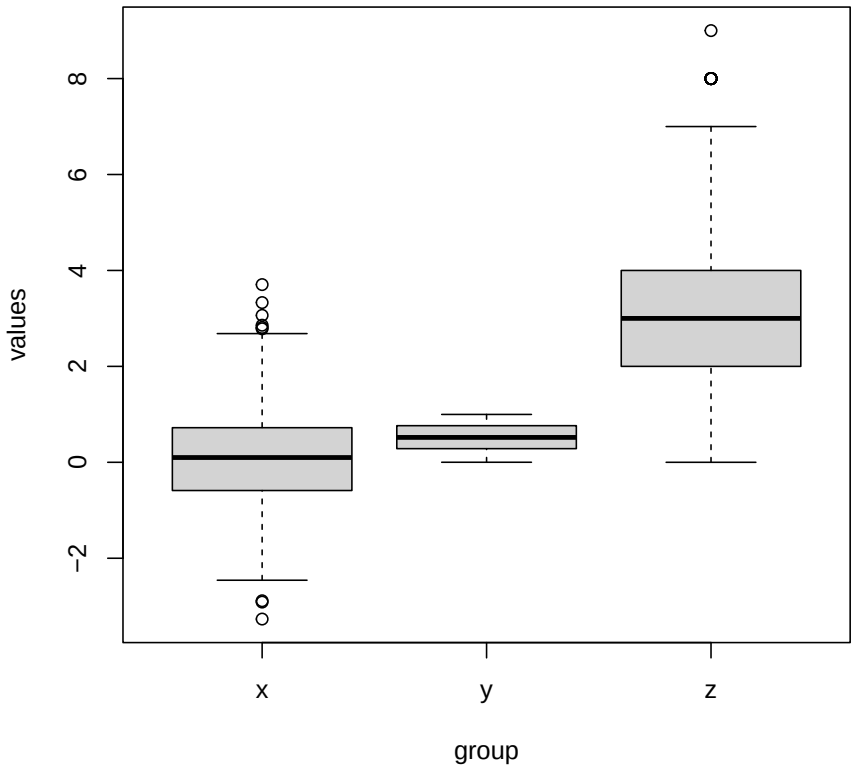
```r
# Load required libraries
library(ggplot2)
# Setting the seed for reproducible random numbers
set.seed(8642, kind = "Mersenne-Twister")
# Load the data
x <- rnorm(1000)
y <- runif(1000)
z <- rpois(1000, 3)
data <- data.frame(values = c(x, y, z),
                   group = c(rep("x", 1000),
                             rep("y", 1000),
                             rep("z", 1000)))
head(data)
```

```
      values group
1 -0.8035458     x
2  0.6384819     x
3 -0.1417869     x
4  2.1542073     x
5 -0.1220888     x
6 -0.7332229     x
```

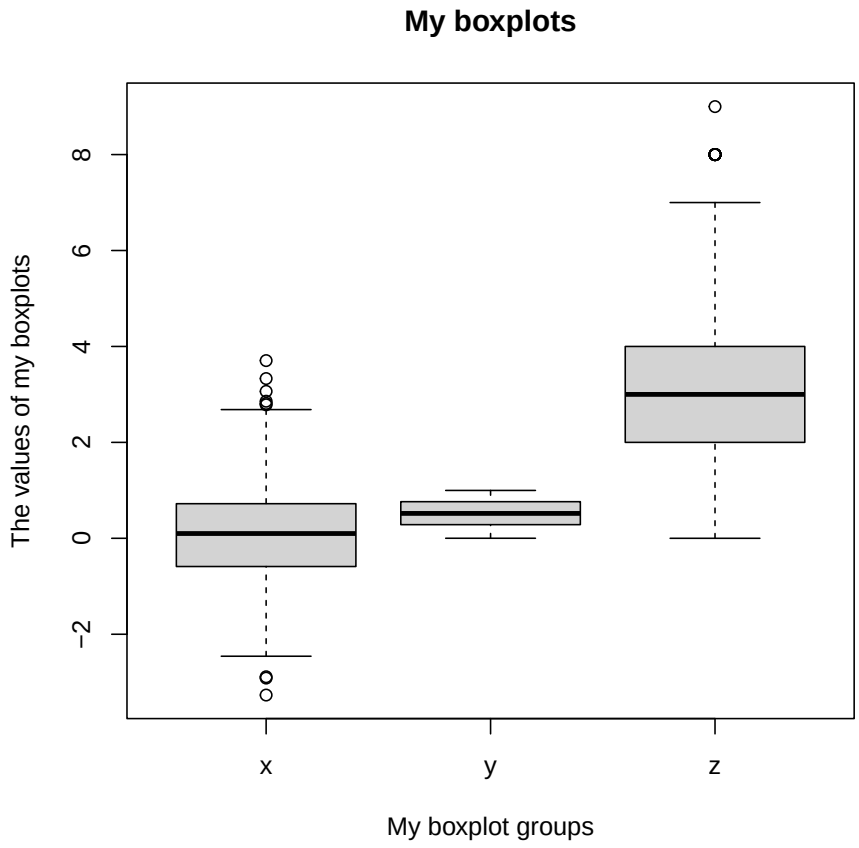
```r
# Create a plot
boxplot(x)
```



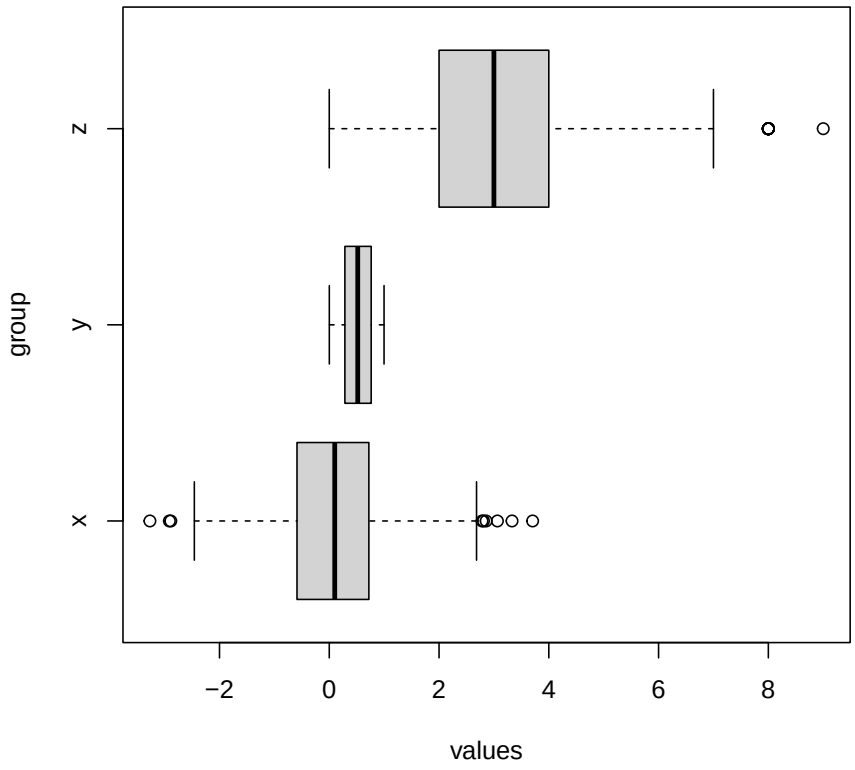

```
boxplot(values ~ group, data)
```



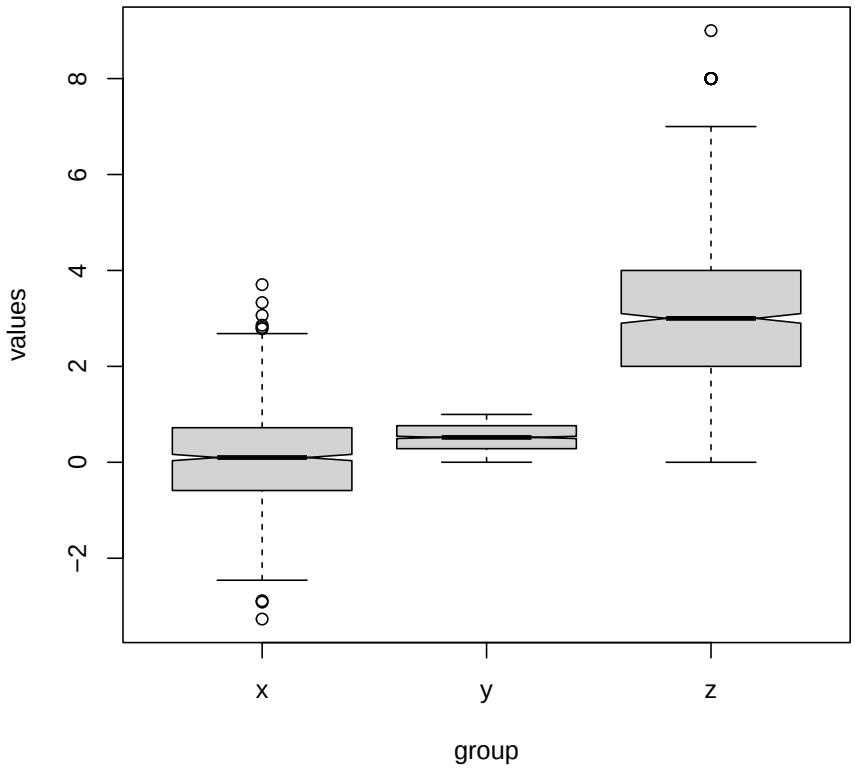

```
boxplot(values ~ group, data,
        main = "My boxplots",
        xlab = "My boxplot groups",
        ylab = "The values of my boxplots")
```



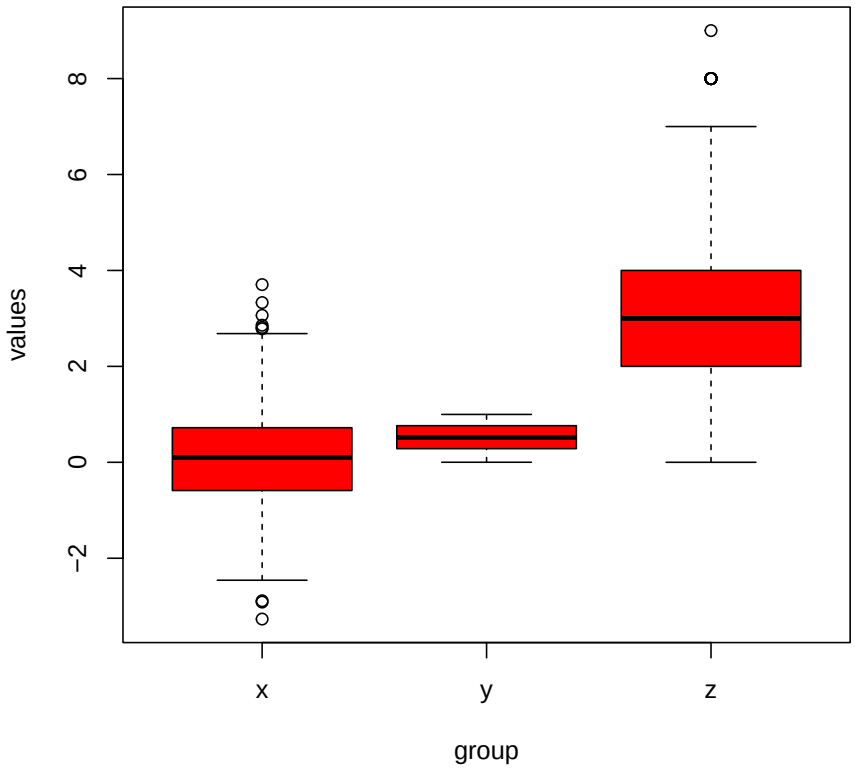

```
boxplot(values ~ group, data,
        horizontal = TRUE)
```



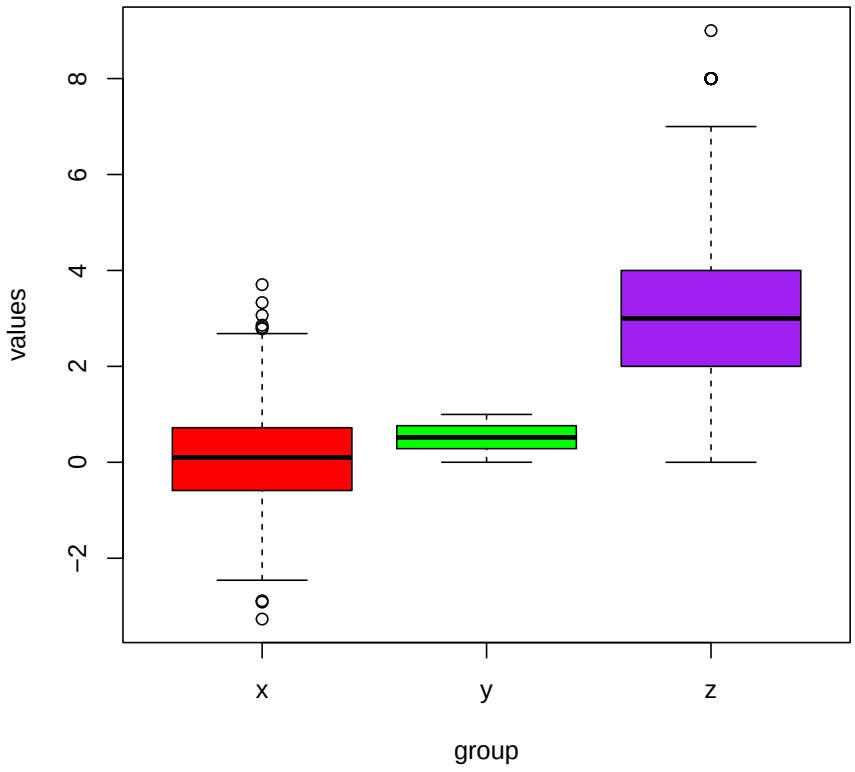

```
boxplot(values ~ group, data,
        notch = TRUE)
```



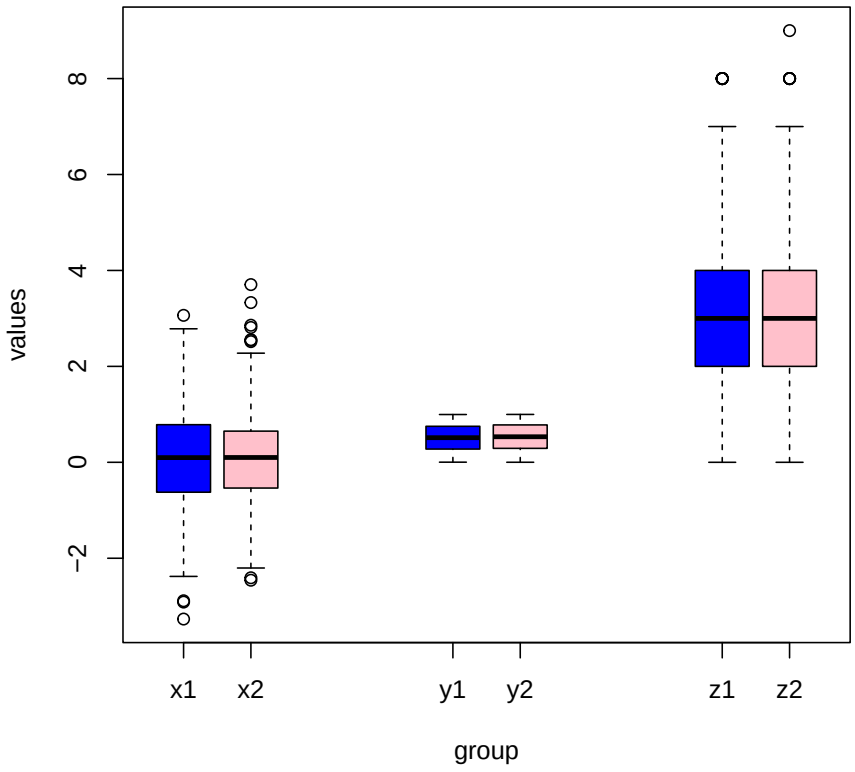

```
boxplot(values ~ group, data,
        col = "red")
```



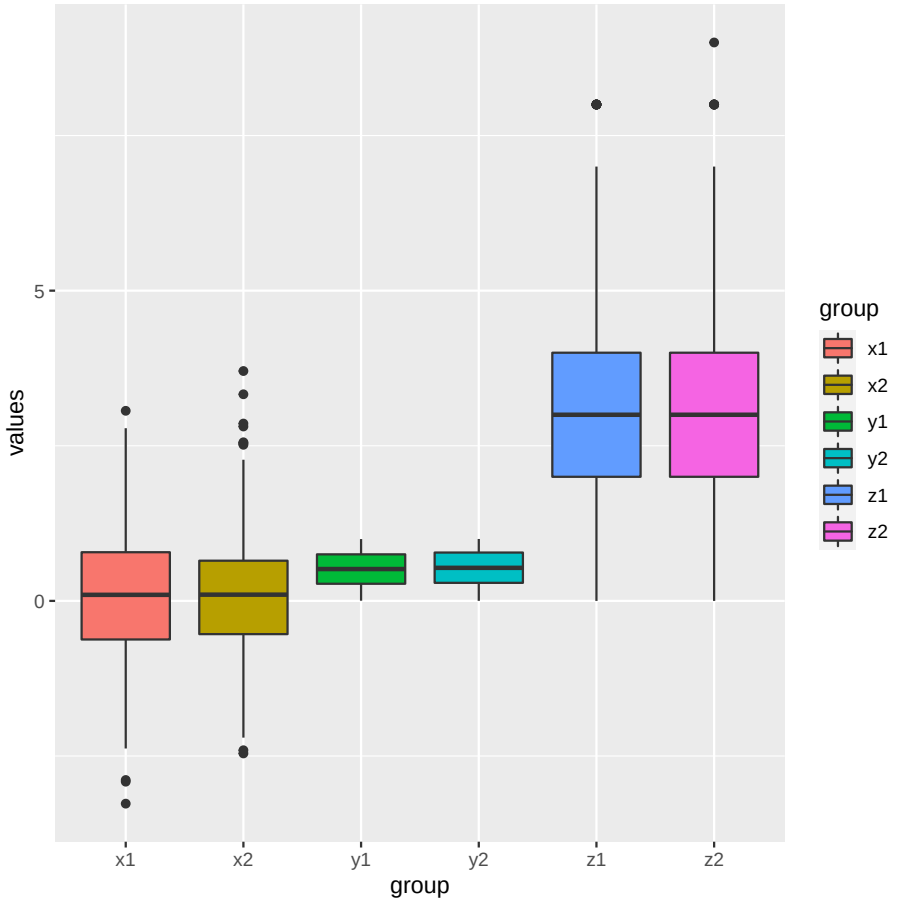

```
boxplot(values ~ group, data,
        col = c("red","green","purple"))
```




```
data2 <- data
data2$group <- c(rep("x1", 500), rep("x2", 500),
                 rep("y1", 500), rep("y2", 500),
                 rep("z1", 500), rep("z2", 500))
boxplot(values ~ group, data2,
        col = c("blue", "pink"),
        at = c(1, 2, 5, 6, 9, 10))
```




```
ggp <- ggplot(data2, aes(x = group, y = values, fill = group)) +
  geom_boxplot()
ggp
```


values
5
0
x1
x2
y1
y2
z1
z2
group
group
x1
x2
y1
y2
z1
z2