Change_Geometric_Plot_Features_Quiz.Rmd

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Use these libraries and the storms data set, as modified below, as a starting point for the following questions:

```
library(tidyverse)
```

```
## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
## v dplyr     1.1.4     v readr     2.1.5
## v forcats   1.0.0     v stringr   1.5.1
## v ggplot2   3.5.1     v tibble    3.2.1
## v lubridate 1.9.3     v tidyr     1.3.1
## v purrr     1.0.2
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

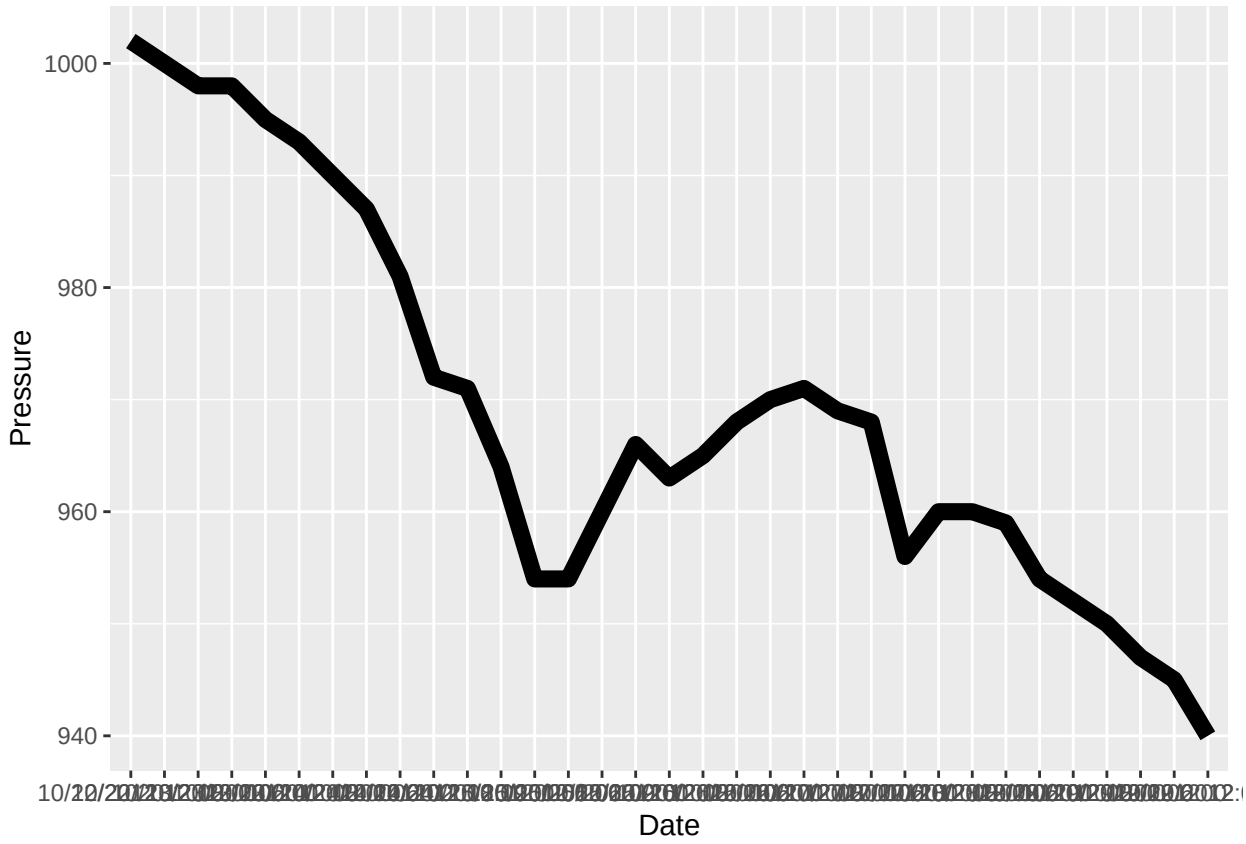
```
library(ellipsis)
storms <- read.csv("storms.csv")
storms$Category <- factor(storms$Category, levels = -1:5) # set the storm category to be a factor
storms$Date <- factor(storms$Date, levels = unique(storms$Date)) # set the measurement date/time to be
sampleStorms <- storms %>%
filter(Name == "Sandy" | Name == "Joaquin" |  Name == "Humberto")
```

CQ1: Create a line plot showing how Hurricane Sandy's air pressure changed over time; in other words, you should have "Date" on the x-axis and "Pressure" on the y-axis. To do this, you'll first need to filter the storms data set to contain only observations of Hurricane Sandy. Save the plot as CQ1.

```
sandy <- sampleStorms %>% filter(Name == "Sandy")
CQ1 <- ggplot(sandy, aes(x = Date, y = Pressure, group=1)) +
geom_line(size = 3)
```

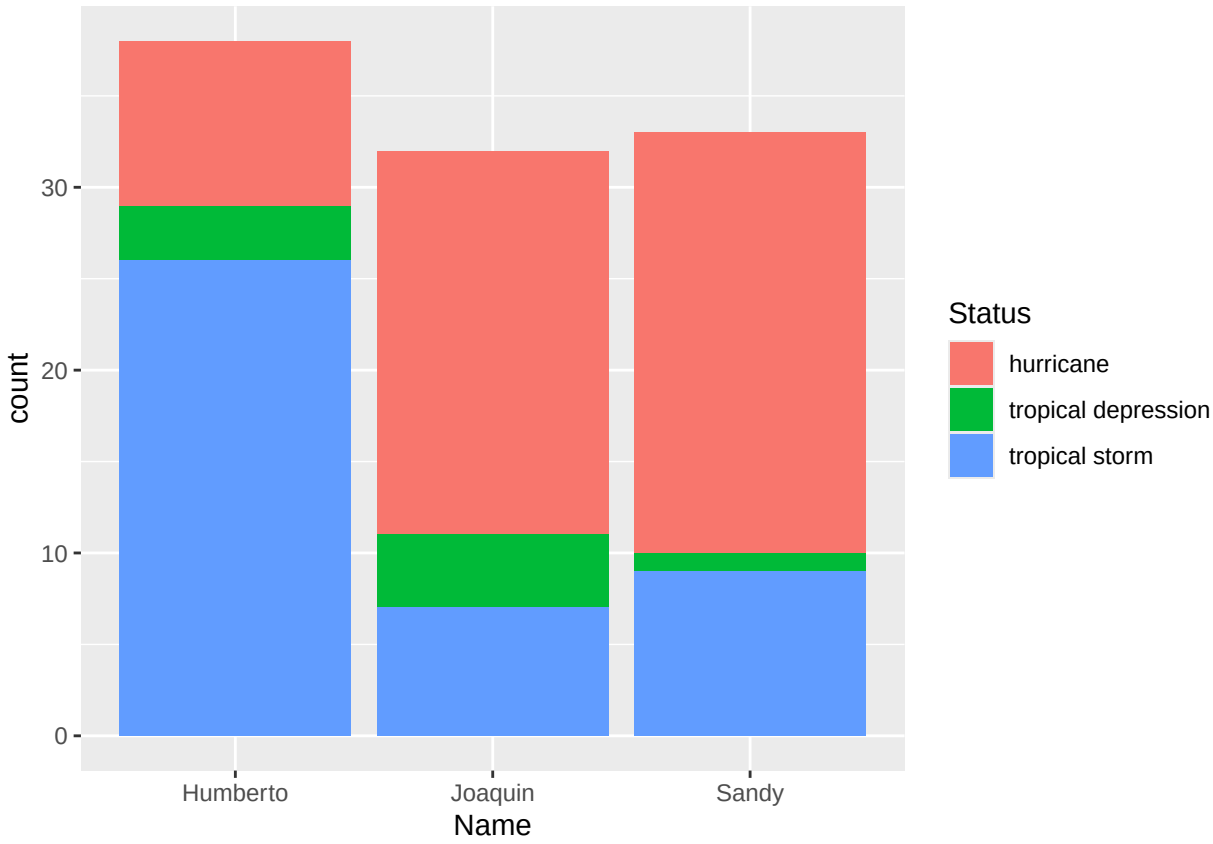
```
## Warning: Using `size` aesthetic for lines was deprecated in ggplot2 3.4.0.
## i Please use `linewidth` instead.
## This warning is displayed once every 8 hours.
## Call `lifecycle::last_lifecycle_warnings()` to see where this warning was
## generated.
```

```
CQ1
```



CQ2: Create a stacked barplot displaying the number of observations for each of the three storms in sampleStorms (Sandy, Joaquin, and Humberto). The stacks should reflect the amount of time that the storm was a tropical depression, tropical storm, and hurricane. (Recall that this information is provided in the Status variable.) Save your answer as CQ2.

```
CQ2 <- ggplot(sampleStorms, aes(x = Name, fill = Status)) +
geom_bar()
CQ2
```


count
30
20
10
0
Humberto
Joaquin
Sandy
Name
Status
hurricane
tropical depression
tropical storm