Plot a multiple group boxplots with data provided

This lab is preconfigured to include all dependencies (libraries, packages, and datasets) you'll need to complete your work in RStudio. You can practice, run test cases, and work on assignments from your browser.

Assignment Overview

In this lab, you are required to use the skills learned from Module 8 to create a R Markdown which includes a grouped boxplot. The data for this lab ia Crop_Range_GOES0901_CountJday.xlsx and can be found in the "Files" tab of RStudio

Requirements for this lab

- Please download the data Download data here into a folder you want to have as your working directory or set you lab to the working directly where you can find Crop_Range_GOES0901_CountJday.xlsx
- Please create a R Markdown file, set the output format as html_document or html_document2. Finally knit the R Markdown file into the HTML file.
- Please use the data provided to conduct a Grouped boxplots based on the step mentioned below.

IMPORTANT REMINDER: Within this In-Browser RStudio lab you'll first need to go to Help -> "Switch Back to the Old Experience" from your lab "Help" toolbar in order to successfully knit a document. Otherwise, you will see a blank preview of your file. You can alternately complete this step in a local RStudio Desktop implementation. More instructions can be found in the Module 1 item: RStudio Lab (In-Browser Option) https://www.coursera.org/learn/ball-state-university-data-visualization/supplement/E9jjS/rstudio-lab-in-browser-option

Steps:

1) Install and load required packages.

```
if (!require(tidyverse)) {install.packages('tidyverse')}; require(tidyverse)
```

```
## Loading required package: tidyverse
```

```
## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
## v dplyr     1.1.2     v readr     2.1.4
## v forcats   1.0.0     v stringr   1.5.0
## v ggplot2   3.4.2     v tibble    3.2.1
## v lubridate 1.9.2     v tidyr     1.3.0
## v purrr     1.0.1
## -- 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
```

```
if (!require(readxl)) {install.packages('readxl')}; require(readxl)
```

```
## Loading required package: readxl
```

2) Load and inspect the dataset.

```
land = read_xlsx('Crop_Range_GOES0901_CountJday.xlsx')
```

3) Plot a grouped boxplot for the variable "CrimeRate" based on the groups from the variable using ggplot().

- Please name your file as Yourname_8.2_Grouped boxplots.RMD
- Please knit your R Markdown file into a HTML file with codes and graphs displayed in your file.

```
# Load the libraries
#Set your own t working directory
# setwd("C:/Users/ali3/DSCI605/Week8/")
###################Read csv and shape file into R
# learners will have this data loaded
land = readxl::read_xlsx('Crop_Range_GOES0901_CountJday.xlsx')
```

Create grouped boxplot

```
land %>% filter(jday%in%seq(235, 243)) %>%
  ggplot(aes(x=as.factor(jday),y=FDCount,fill=as.factor(jday)))+
  geom_boxplot(outlier.colour="red", outlier.shape=8,outlier.size=2)+
  xlab("Julian Day")+
  ##Change the title of legend
  labs(fill="Julian Day") +
  ggtitle("Boxplot")
```