Chapter 10 Part 2

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Data Set

Use the diamonds data set within the ggplot2/tidyverse package and perform k-means, k-mediods, CLARA, BIRCH, CHAMELEON, and DBSCAN clustering. Do not use the price variable in your clustering. Once you have completed each clustering determine the mean and standard deviation of the price for each cluster. You must then determine whcih technique was teh most useful for this situation and why that is.

```
library(tidyverse)
```

```
## -- Attaching packages --------------------------------------- tidyverse 1.3.2 --
## v ggplot2 3.3.6      v purrr   0.3.4
## v tibble  3.1.8      v dplyr   1.0.10
## v tidyr   1.2.1      v stringr 1.4.1
## v readr   2.1.3      v forcats 0.5.2
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
```

```
diamon <- diamonds
```