

Diamonds Data

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Diamonds Data Visual

This is a data viz using ggplot2 for diamonds data in R.

First ensure necessary packages are installed and loaded like this:

```
install.packages("tidyverse")

## Installing package into '/cloud/lib/x86_64-pc-linux-gnu-library/4.2'
## (as 'lib' is unspecified)

library(tidyverse)

## -- Attaching packages ----- tidyverse 1.3.2 --
## v ggplot2 3.3.6      v purrr  0.3.5
## 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()
```

Data structure preview

We could get a preliminary structure of our dataset before plotting

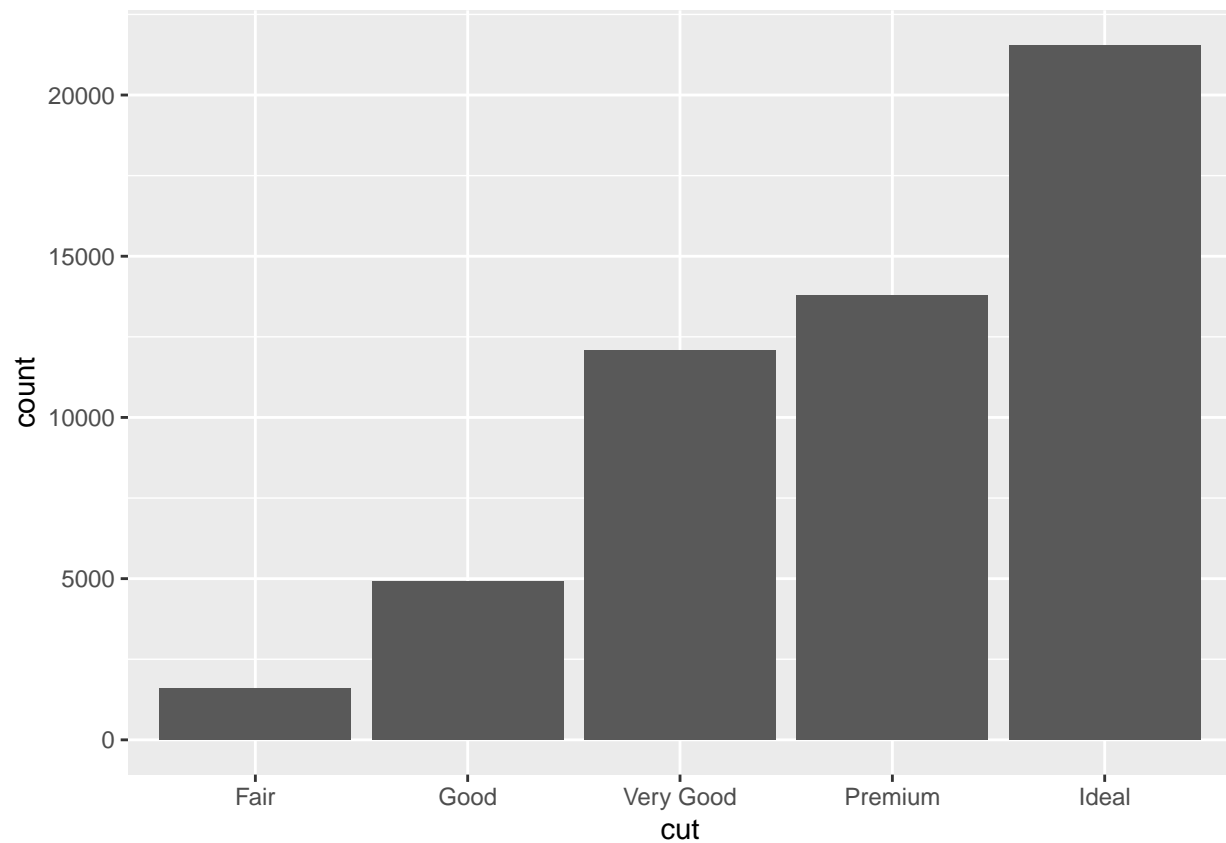
```
data("diamonds")
head(diamonds)

## # A tibble: 6 x 10
##   carat cut      color clarity depth table price      x      y      z
##   <dbl> <ord>    <ord> <ord>    <dbl> <dbl> <int> <dbl> <dbl> <dbl>
## 1  0.23 Ideal     E     SI2     61.5   55   326   3.95   3.98   2.43
## 2  0.21 Premium  E     SI1     59.8   61   326   3.89   3.84   2.31
## 3  0.23 Good     E     VS1     56.9   65   327   4.05   4.07   2.31
## 4  0.29 Premium  I     VS2     62.4   58   334   4.2    4.23   2.63
## 5  0.31 Good     J     SI2     63.3   58   335   4.34   4.35   2.75
## 6  0.24 Very Good J     VVS2     62.8   57   336   3.94   3.96   2.48
```

Including Plots

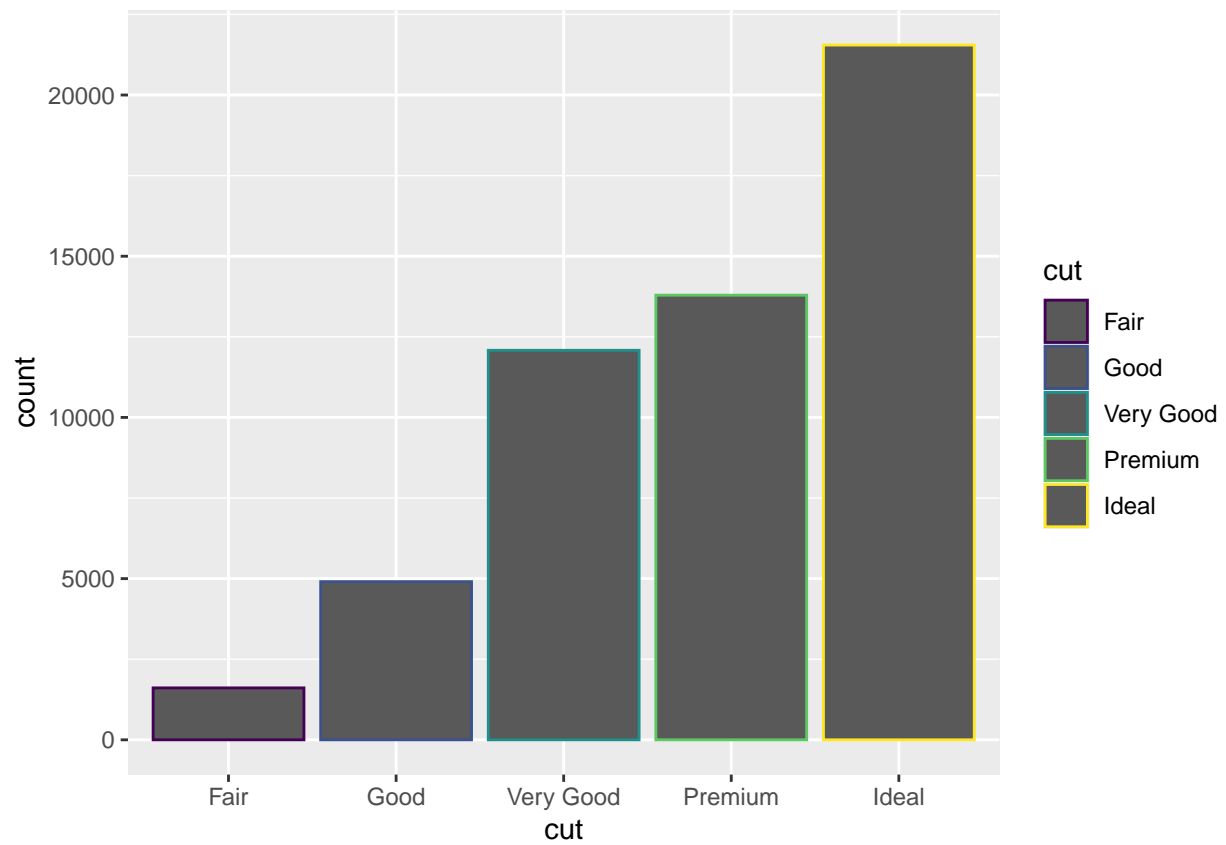
Now we can show our data with simple ggplot functions as below:

```
ggplot(data = diamonds) + geom_bar(mapping = aes(x = cut))
```

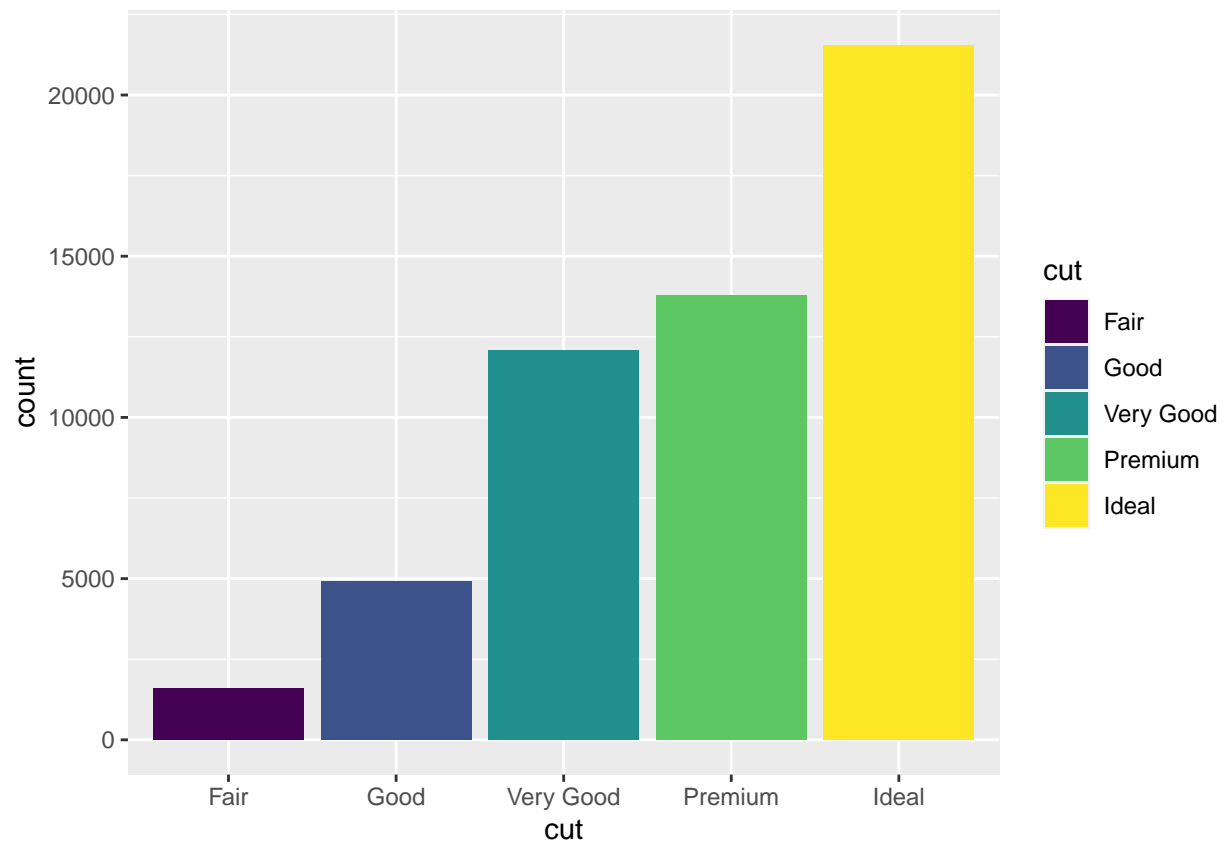


Let's add some color to our visual. Note: First code line only colors the edges but the second code line gives more color context

```
ggplot(data = diamonds) + geom_bar(mapping = aes(x = cut, color=cut))
```



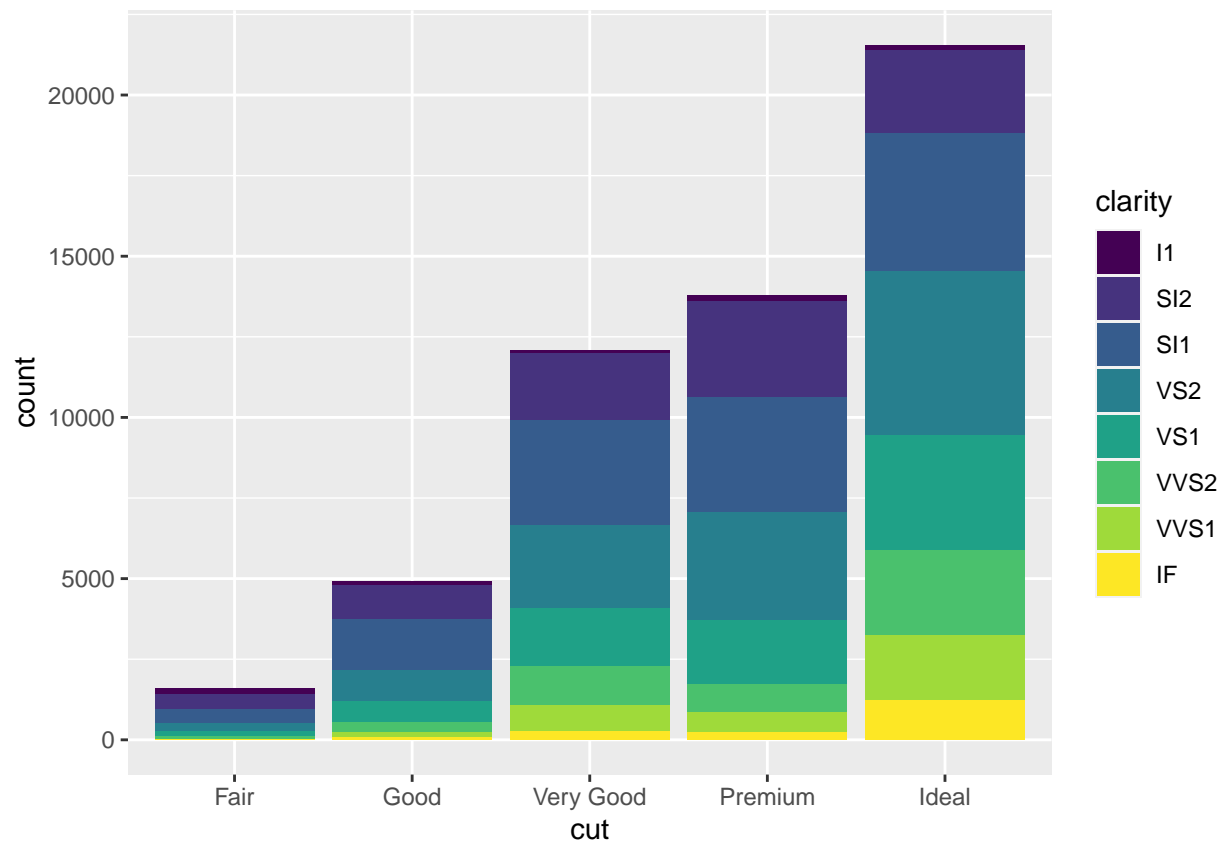
```
ggplot(data = diamonds) + geom_bar(mapping = aes(x = cut, fill=cut))
```



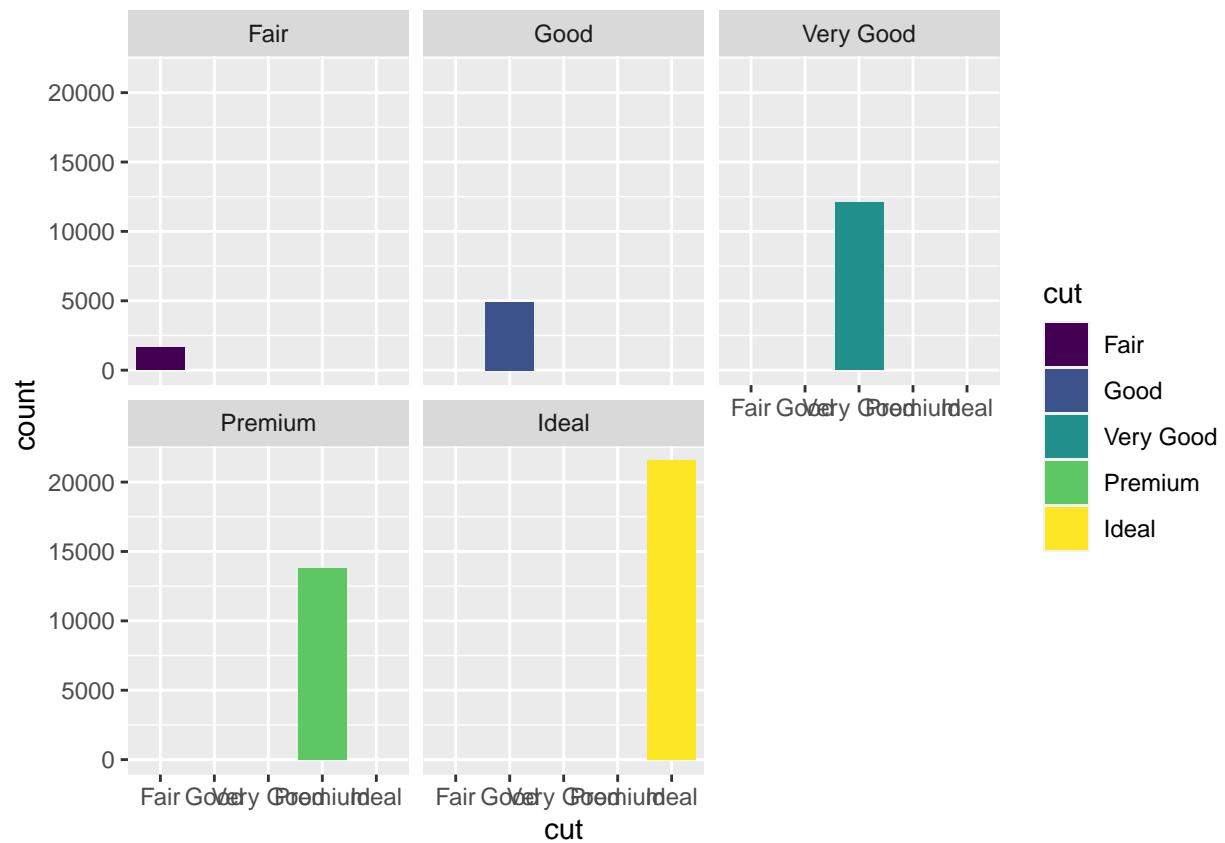
More plotting options

We could get more out of our data by adding more visual functions

```
ggplot(data = diamonds) + geom_bar(mapping = aes(x = cut, fill=clarity))
```



```
ggplot(data = diamonds) + geom_bar(mapping = aes(x = cut, fill=cut)) + facet_wrap(~cut)
```



More plots and functions are possible depending on the data and the expected outcome.