# Exploratory analysis of diamonds dataset - Bar graph, stacked bar graph, Dodge bar graph

# Import diamonds dataset

library(tidyverse)

# Read the diamonds dataset

data(diamonds)

# Summary statistics of diamonds dataset

summary(diamonds)

# Frequency of diamond cut within cut classes

# Variables used - x-axis cut

ggplot(diamonds, aes(x=cut)) +

geom\_bar(color="blue", fill="blue") +

labs (x = "Cut classes",

y = "Count",

title = "Frequency of diamond cut within cut classes") +

theme(legend.position="top")

Chart, histogram

Description automatically generated

# Total price of diamond cut within cut classes

# Variables used - x-axis cut, y axis price

ggplot(diamonds, aes(x=cut, weight= price/1000)) +

geom\_bar(color="blue", fill="blue") +

labs (x = "Cut classes",

y = "Total price/1000 of diamond cut class",

title = "Total price of diamond cut within cut classes") +

theme(legend.position="top")

Chart, histogram

Description automatically generated

# Total price of diamond cut within cut classes

# Variables used - x-axis cut, y axis price, fill color cut

ggplot(diamonds, aes(x=cut, weight= price/1000, fill = cut)) +

geom\_bar() +

labs (x = "Cut classes",

y = "Total price/1000 of diamond cut class",

title = "Total price of diamond cut within cut classes") +

theme(legend.position="right")

Chart, bar chart

Description automatically generated

# Stacked bar graph

ggplot(diamonds, aes(x=cut, weight= price/1000, fill = clarity)) +

geom\_bar() +

labs (x = "Cut classes",

y = "Total price/1000 of diamond cut class",

title = "Total price of diamond cut within cut classes") +

theme(legend.position="right")

Chart, bar chart

Description automatically generated

# dodge bar graph

ggplot(diamonds, aes(x=cut, weight= price/1000, fill = clarity)) +

geom\_bar(position = "dodge") +

labs (x = "Cut classes",

y = "Total price/1000 of diamond cut class",

title = "Total price of diamond cut within cut classes") +

theme(legend.position="right")

Chart, bar chart

Description automatically generated

# Horizontal Stacked bar graph

ggplot(diamonds, aes(y=cut, weight= price/1000, fill = clarity)) +

geom\_bar() +

labs (y = "Cut classes",

x = "Total price/1000 of diamond cut class",

title = "Total price of diamond cut within cut classes") +

theme(legend.position="right")

Chart

Description automatically generated