#Q1

install.package("ggplot2")

library(ggplot2)

data(pressure)

str(pressure)

ggplot(pressure, aes(x = temperature)) +

geom\_line(aes(y = pressure), color = "blue") +

geom\_line(aes(y = pressure / 2), color = "red") +

geom\_line(aes(y = pressure \* 2), color = "green") +

geom\_point(aes(y = pressure), color = "blue") +

geom\_point(aes(y = pressure / 2), color = "red") +

geom\_point(aes(y = pressure \* 2), color = "green") +

labs(x = "Temprature", y = "Pressure", title = "Pressure vs Temprature")

#Q2

library(gcookbook)

library(tidyverse)

library(dplyr)

data(uspopchange)

upc=uspopchange %>%

arrange(desc(Change)) %>%

slice(1:10) %>%

view

ggplot(upc)+

aes(x=Abb,y=Change, fill=Region )+

geom\_col()

ggplot(upc)+

aes(x=Abb, y=Change, fill=Region)+

geom\_col(colour="black")+

scale\_fill\_manual(values = c("green", "red"))+

xlab("State")+

ylab("Population Change")

#Q3

library(ggplot2)

data("diamonds")

#i:

diamonds\_n <- diamonds %>%

select\_if(is.numeric)

diamonds\_n

#ii:

diamonds\_mean <- lapply(diamonds\_n, mean)

diamonds\_mean

#iii:

diamonds\_numeric\_index=sapply(diamonds,is.numeric)

diamonds\_numeric\_index

diamonds\_not\_numeric\_index=!diamonds\_numeric\_index

diamonds\_not\_numeric\_index

diamonds\_fact=diamonds[diamonds\_not\_numeric\_index]

diamonds\_fact

#vi:

table(diamonds\_fact$color)

ggplot(diamonds\_fact)+

aes(color) +

geom\_bar()

#v:

diamonds\_char=lapply(diamonds\_fact, length)

diamonds\_char