

# HW02\_Assignment1Exercise2and3

```
library(ggplot2)
library(tidyverse)
library(datasets)
library(tibble)
library(gapminder)
```

Exercise 2 and 3

## Pick one quantitative variable out of dataset Gapminder - Population

What is the range in Population?

```
summarise(gapminder, minpop = min(pop), maxpop=max(pop))

## # A tibble: 1 x 2
##   minpop    maxpop
##   <int>    <int>
## 1  60011 1318683096
```

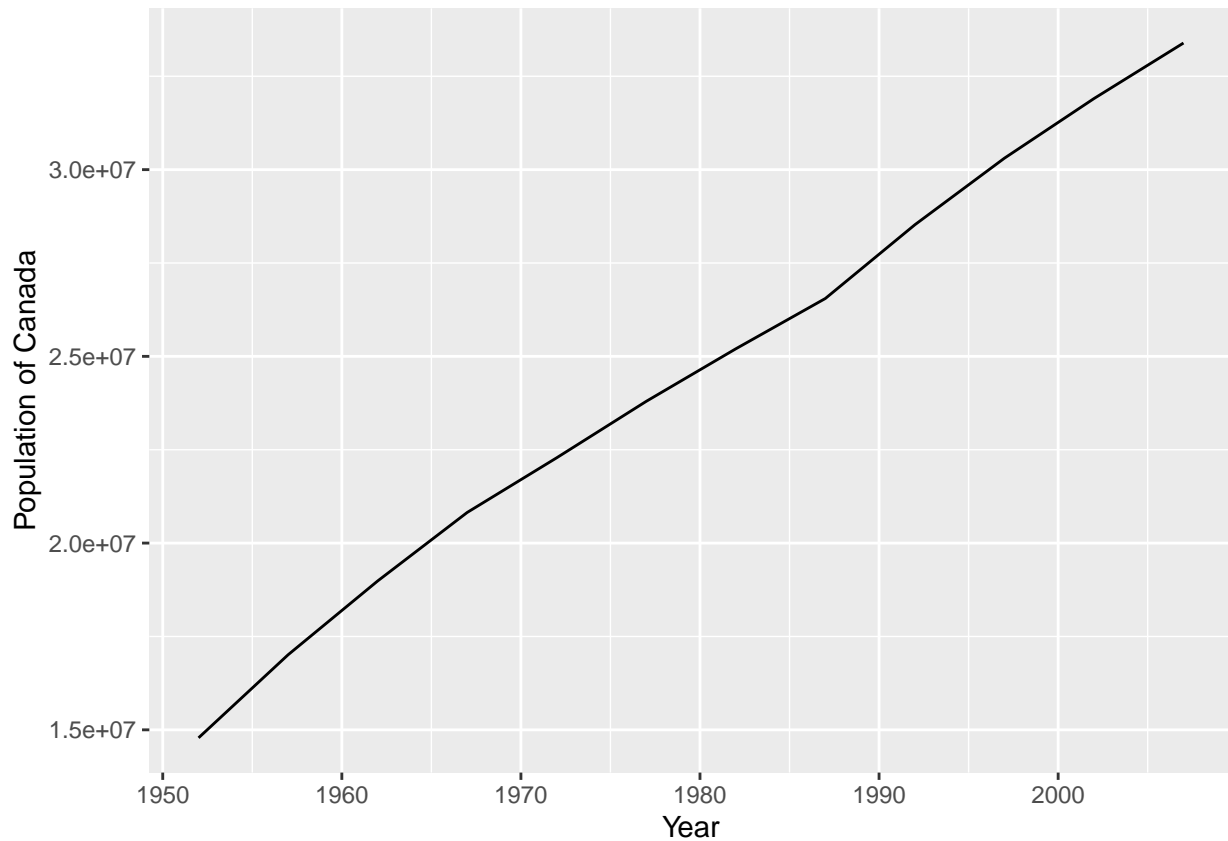
What is the mean population?

```
summarise(gapminder, meanpop = mean(pop))

## # A tibble: 1 x 1
##   meanpop
##   <dbl>
## 1 29601212.
```

Graph of data spread - Population in Canada from 1952 - 2007

```
gapminder %>%
  filter(country == 'Canada') %>%
  arrange(year) %>%
  ggplot(aes(year, pop)) +
  geom_line() +
  ylab("Population of Canada") +
  xlab("Year")
```



Pick one categorical variable out of dataset HairEyeColour - Eye Colour

What are the ranges in eye colour?

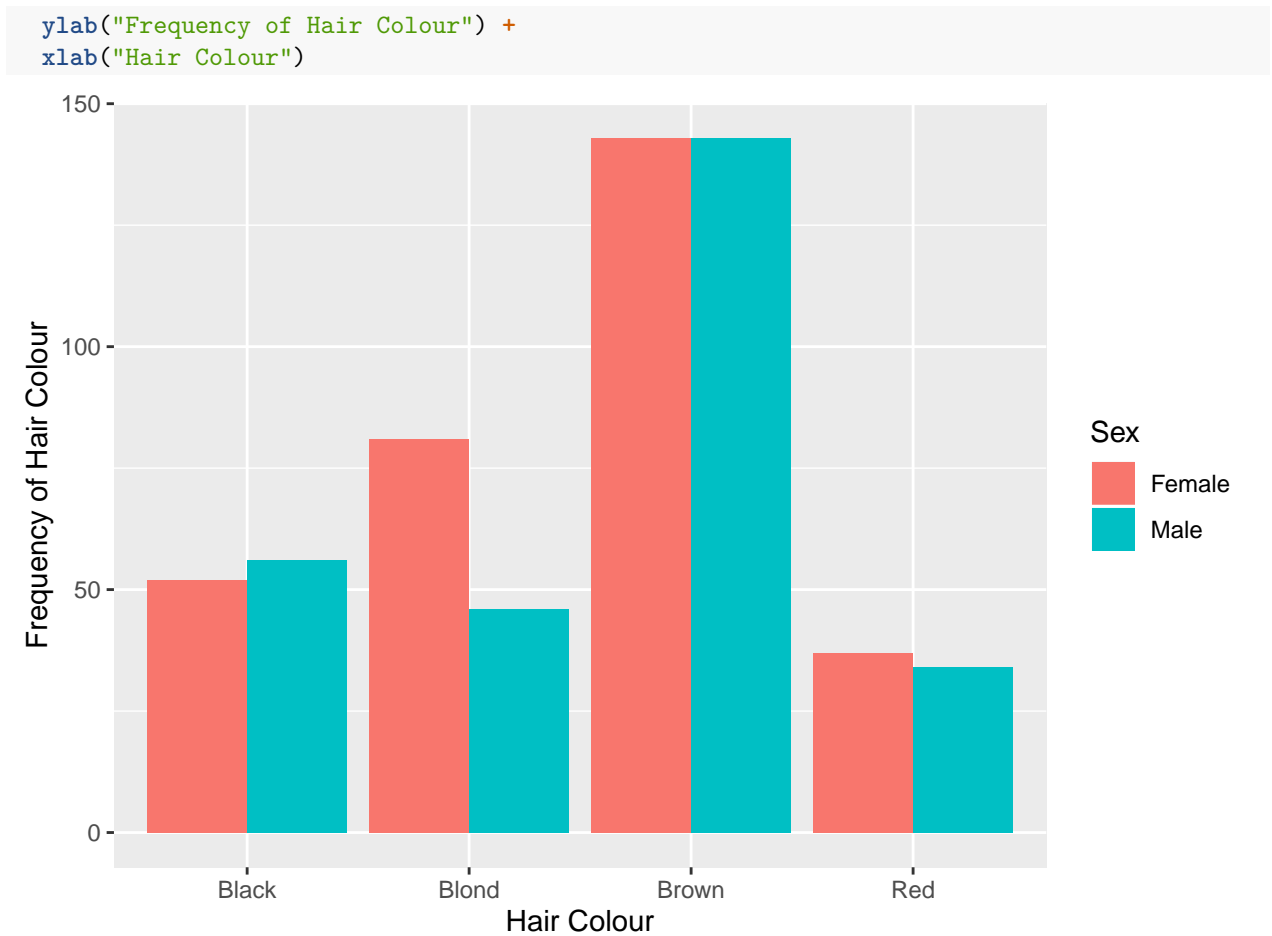
```
HairEyeColor %>%
  as_tibble() %>%
  distinct(Hair)
```

```
## # A tibble: 4 x 1
##   Hair
##   <chr>
## 1 Black
## 2 Brown
## 3 Red
## 4 Blond
```

```
HEC = HairEyeColor %>%
  as_tibble()
```

Plot the distribution of Hair Colour in a Plot to fulfill Exercise 3 requirement

```
HEC %>%
  ggplot(aes(Hair, weight = n, fill = Sex))+
  geom_bar(position = "dodge") +
```



Plot the distribution of life expectancy in American (North and South) countries from 2000 - 2007 vs GDP

```
gapminder %>%
  filter(continent == 'Americas', year >= 2000) %>%
  arrange(year) %>%
  ggplot(aes(gdpPercap, lifeExp, colour = country)) +
    geom_point() +
    geom_smooth(method = lm, se = FALSE) +
    scale_x_log10() +
    xlab('GDP') +
    ylab('Life Expectancy')
```

