hw01_presentation

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Loading the necessary packages

```
library(gapminder)
library(tibble)
library(dplyr)
```

```
##
## Attaching package: 'dplyr'

## The following objects are masked from 'package:stats':
##
##     filter, lag

## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

Formatting the preliminary dataset

```
raw_data <- gapminder %>%
  as_tibble()
```

Plotting Canadian life expectancy from 1952 to 2007

1. Isolating Columns
2. Filtering Data by Rows
3. Plot Results

Isolate Country, Life Exp, and Year columns

```
col_data <- raw_data %>%
  select(country,year,lifeExp)
```

Isolate Canadian data only

```
refined_data <- col_data %>%
  filter(country=="Canada")
```

Create scatterplot

Note: requires plotrix package.

```
attach(refined_data) # Defines dataset as current obj.
plot_title <- "Canadian Life Expectancy, 1952-2007"
x_title <- "Year"
y_title <- "Life Expectancy (years)"
p <- plot(year, lifeExp, main=plot_title,
          xlab=x_title,ylab=y_title)

# Add line of best fit:
fit <- lm(lifeExp~year)
abline(fit, col="red")

# Add R squared value to plot:
rsq <- summary(fit)$adj.r.squared %>%
  format(digits=3) %>%
  as.character()
rsq_label <- paste("R^2: ",rsq)
plotrix::corner.label(rsq_label)
```

Scatterplot output