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title: "WEEK2 UPDATED"  
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date: "`r Sys.Date()`"  
output: html_document
```

```
library(gapminder)  
data("gapminder")  
view(gapminder)
```

```
#Data overview
```

```
summary(gapminder)  
glimpse(gapminder)  
names(gapminder)  
head(gapminder)  
print(gapminder)
```

```
#Centrality
```

```
mean(gapminder$pop)  
mean(gapminder$gdpPercap)  
mean(gapminder$lifeExp)
```

```
median(gapminder$pop)  
median(gapminder$gdpPercap)  
median(gapminder$lifeExp)  
var(gapminder$pop)  
var(gapminder$gdpPercap)  
var(gapminder$lifeExp)
```

```
summary(gapminder$pop)
cor.test(gapminder$gdpPercap, gapminder$lifeExp)
```

```
#Create a subset of the data frame
```

```
library(gapminder)
data("gapminder")
```

```
gapminder_3 <- gapminder[25:48, 3:6, drop= FALSE]
view(gapminder_3)
print(gapminder_3)
head(gapminder_3)
```

```
#Create new column names in the new data frame
```

```
library(tidyverse)
gapminder_3 %>%
mutate(Population=
pop, Life_Expectancy=lifeExp, GDP=gdpPercap) %>%
select(Population, Life_Expectancy, GDP)
```

```
head(gapminder_3)
print(gapminder_3)
```

```
# summary of new data frame
```

```
summary(gapminder_3)
```

```
# Assigning new columns names
```

```
gapminder_4 <- c(gapminder_3 %>%  
mutate(Population=  
pop,Life_Expectancy=lifeExp,GDP=gdpPercap) %>%  
select(Population,Life_Expectancy,GDP))  
print(gapminder_4)  
glimpse (gapminder_4)  
head(gapminder_4)
```

```
# comparing Life Expectancy and GDP in new data  
frame
```

```
gapminder_4[c("Life_Expectancy","GDP")]
```

```
# comparing lifeExp and gdpPercap in original data  
frame
```

```
gapminder[c("lifeExp","gdpPercap")]
```