

```
---
title: "WEEK2"
author: "Heleine Fouda"
date: "`r Sys.Date()`"
output:
  html_document: default
  word_document: default
  pdf_document: default
---
```{r setup, include=FALSE}
knitr::opts_chunk$set(echo = TRUE)
library(gapminder)
```
```

Data frame overview

```
```{r, echo=TRUE}
summary(gapminder)
```
```

```
```{r echo=TRUE}
head(gapminder)
```
```

```
```{r, echo=TRUE}
names(gapminder)
```
```

```
```{r, echo=TRUE}
print(gapminder)
```
```

Centralty

```
```{r, echo=TRUE}
mean(gapminder$pop)
```
```

```
```{r, echo=TRUE}
var(gapminder$pop)
```
```

```
```{r, echo=TRUE}
mean(gapminder$gdpPercap)
```
```

```
```{r, echo=TRUE}
median(gapminder$gdpPercap)
```

```

```
```{r, echo=TRUE}
var(gapminder$gdpPercap)
```

```{r, echo=TRUE}
mean(gapminder$lifeExp)
```

```{r, echo=TRUE}
median(gapminder$lifeExp)
```

```{r, echo=TRUE}
var(gapminder$lifeExp)
```

```{r echo=TRUE}
cor.test(gapminder$gdpPercap,gapminder$lifeExp)
```

## Creating a subset of gapminder

```{r, echo=TRUE}
new_dataset<- gapminder[25:30,3:6, drop= FALSE]
```

```{r , echo=TRUE}
summary(new_dataset)
```

## Assigning new columns names

```{r,echo=TRUE}
data.frame(Population=
gapminder$pop,Life_Expectancy=gapminder$lifeExp,GDP=gapminder$gdpPercap)

```

```{r, echo=TRUE}
summary(new_dataset)
```

```{r gapminder, include=FALSE}
head(new_dataset)
```

```

```
## comparing life Expectancy and GDP per capita in old and new data set
```

```
` `{r, echo=TRUE, paged.print=TRUE}  
gapminder[c("lifeExp", "gdpPercap")]
```

```
` `
```

```
install.packages("dplyr")  
install.packages("starwars")  
?mutate
```