Laboratorio45-MD

Leislie R. Manjarrez O.

2023-03-13

Hecho con gusto por Leislie R. Manjarrez O.

Laboratorio 45- Grafico de puntos con ggplot2

Instalar paquete de datos install.packages(“gapminder”)

Llamar la libreria

```
library(gapminder)
```

Cargar los datos al entorno

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

Crear objeto filtrando por año

```
gapminder2007 <- gapminder [gapminder$year == "2007",]
```

Visualizar encabezados

```
head(gapminder2007)
```

```
## # A tibble: 6 × 6
##   country     continent  year lifeExp      pop gdpPercap
##   <fct>       <fct>     <int>   <dbl>    <int>     <dbl>
## 1 Afghanistan Asia       2007    43.8 31889923      975.
## 2 Albania     Europe     2007    76.4  3600523     5937.
## 3 Algeria     Africa     2007    72.3 33333216     6223.
## 4 Angola      Africa     2007    42.7 12420476     4797.
## 5 Argentina   Americas   2007    75.3 40301927    12779.
## 6 Australia   Oceania    2007    81.2 20434176    34435.
```

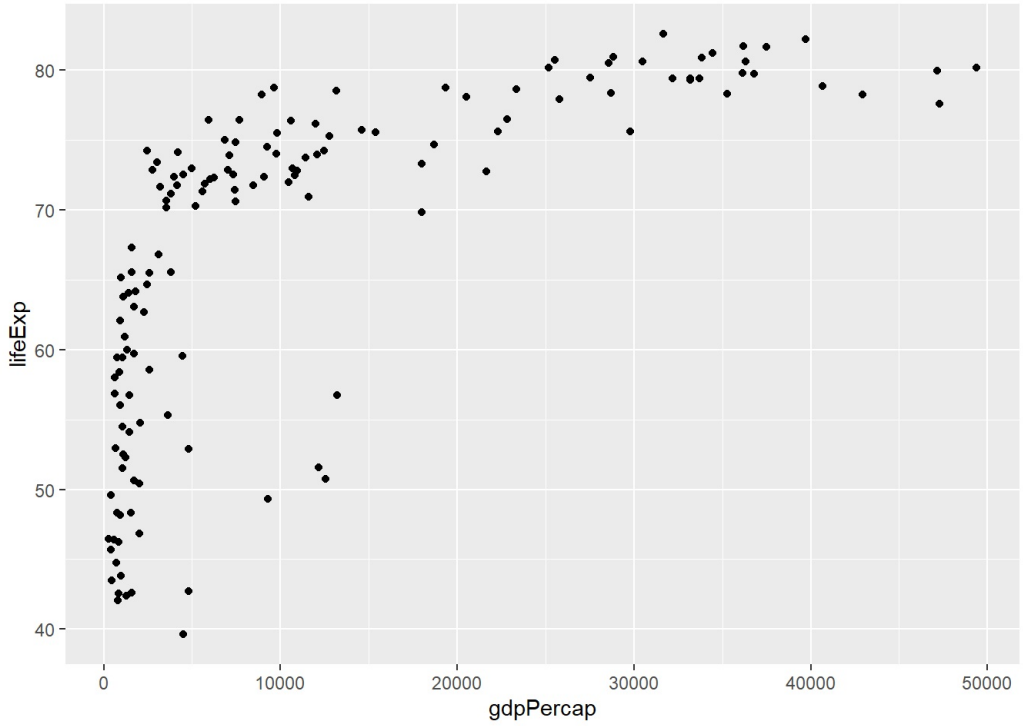
Instalar ggplot2 install.packages(“ggplot2”)

Llamar a la libreria

```
library(ggplot2)
```

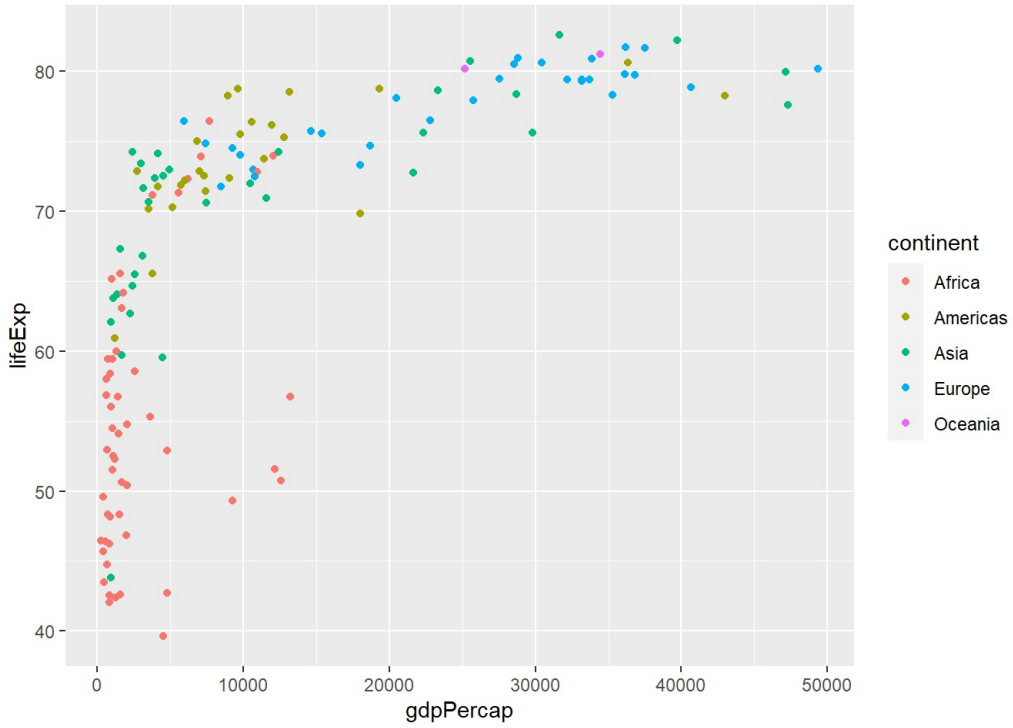
Crear un gráfico de puntos con ggplot

```
ggplot(data = gapminder2007,
       mapping = aes(x = gdpPercap,
                     y = lifeExp)) +
  geom_point()
```



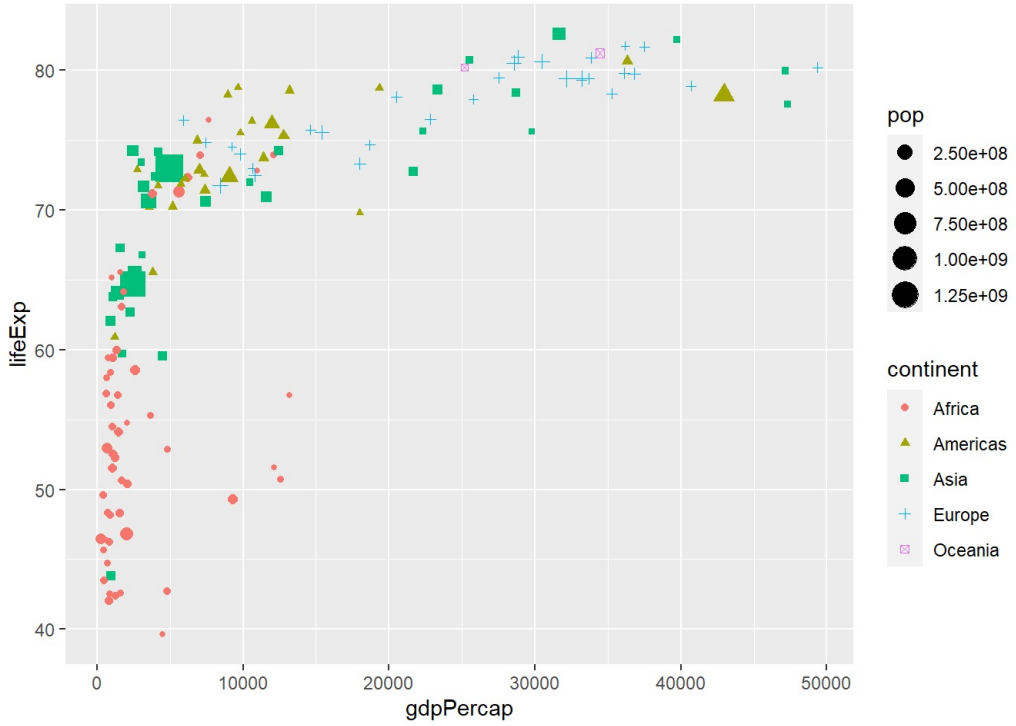
Probando con distintos colores

```
ggplot(data = gapminder2007,
       mapping = aes(x = gdpPercap,
                     y = lifeExp,
                     color = continent)) +
  geom_point()
```



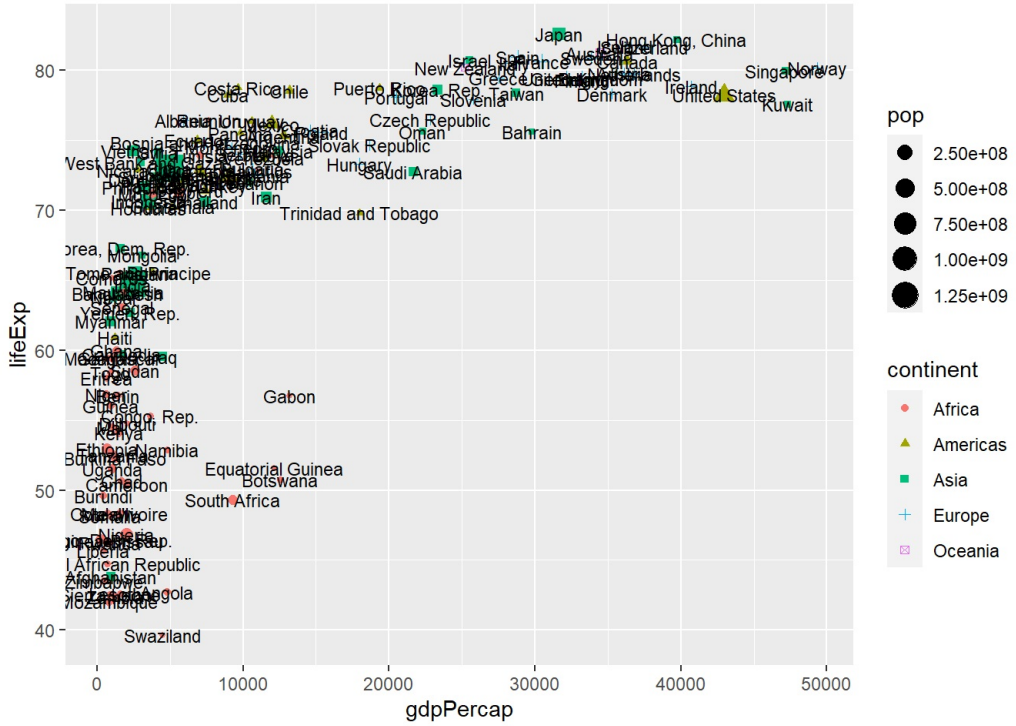
Probando mas esteticas como forma y tamano

```
ggplot(data = gapminder2007,
       mapping = aes(x = gdpPercap,
                     y = lifeExp,
                     color = continent,
                     shape = continent,
                     size = pop)) +
  geom_point()
```



Anadiendo texto

```
ggplot(data = gapminder2007,
       mapping = aes(x = gdpPercap,
                     y = lifeExp,
                     color = continent,
                     shape = continent,
                     size = pop)) +
  geom_point() +
  geom_text(label = gapminder2007$country,
            color = "black",
            size = 3)
```



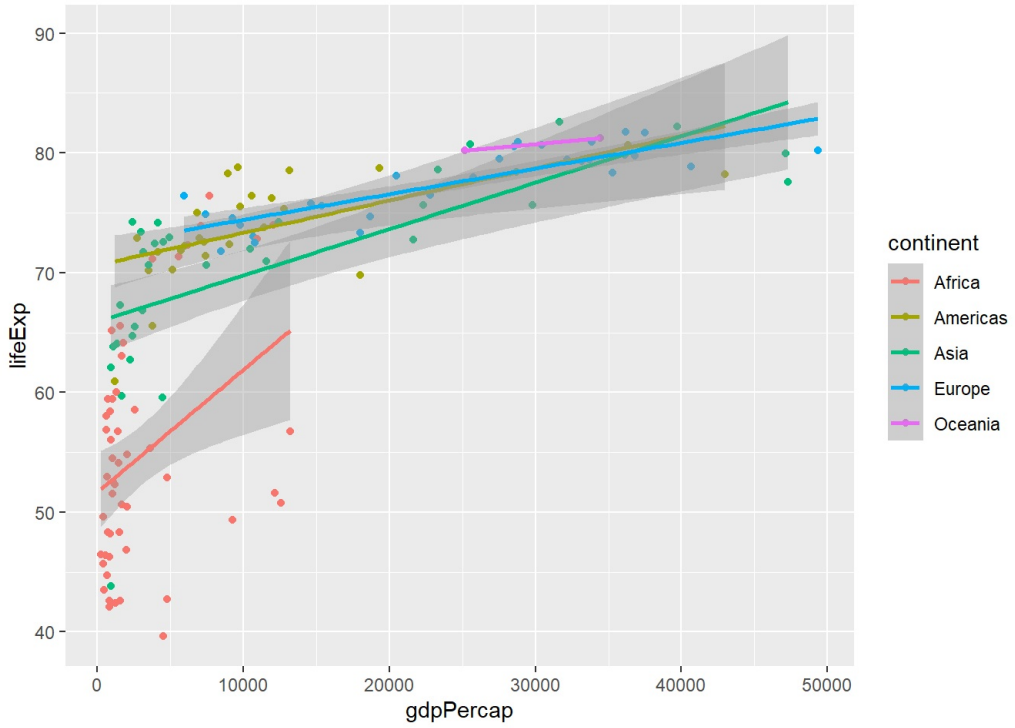
Colocando lineas de regresion

```
ggplot(data = gapminder2007,
       mapping = aes(x = gdpPercap,
                     y = lifeExp,
                     color = continent)) +
  geom_point() +
  geom_smooth (method = lm)
```

```
## `geom_smooth()` using formula = 'y ~ x'
```

```
## Warning in qt((1 - level)/2, df): NaNs produced
```

```
## Warning in max(ids, na.rm = TRUE): ningun argumento finito para max; retornando
## -Inf
```



Quitando desviacion estandar de las lineas de regresion

```
ggplot(data = gapminder2007,
       mapping = aes(x = gdpPercap,
                     y = lifeExp,
                     color = continent)) +
  geom_point() +
  geom_smooth (method = lm,
               se = FALSE,
               fullrange = TRUE)
```

```
## `geom_smooth()` using formula = 'y ~ x'
```