title: “LABS_52”

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output: html_document

LABORATORIO DE EDICIÓN DE COLOR-PARTE 2
##

LABORATORIO - Gráficos en R con ggplot2 para Ciencia de Datos Editando el color de los gráficos (PARTE 1)

Instalando paquete con los datos install.packages(“gapminder”) install.packages(“ggplot2”)

cargar libreria ggplot2 y gapminder

```
library(ggplot2)
library(gapminder)
```

cargando datos a entorno

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

filtrando por año 2007

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

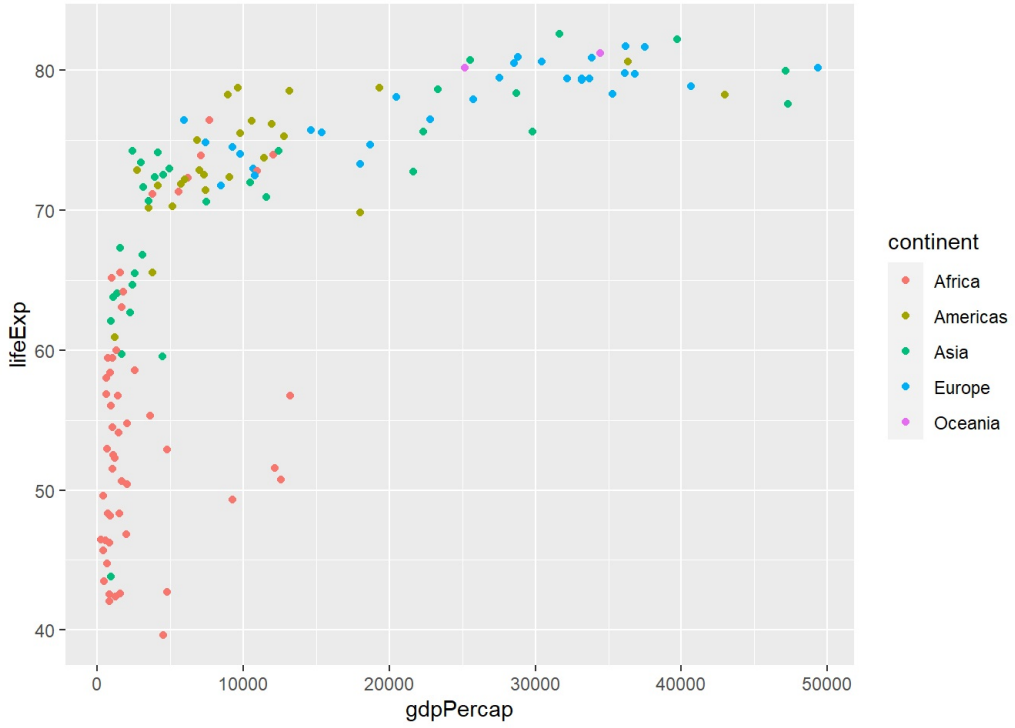
De donde sacar colores? http://www.stat.columbia.edu/~tzheng/files/Rcolor.pdf (http://www.stat.columbia.edu/~tzheng/files/Rcolor.pdf)

Escala discreta haciendo grafica de puntos por continente

```
g1 <- ggplot(data = gapminder2007,
             mapping = aes(x = gdpPercap,
                           y = lifeExp,
                           color = continent)) +
  geom_point()
```

ver g1

```
g1
```

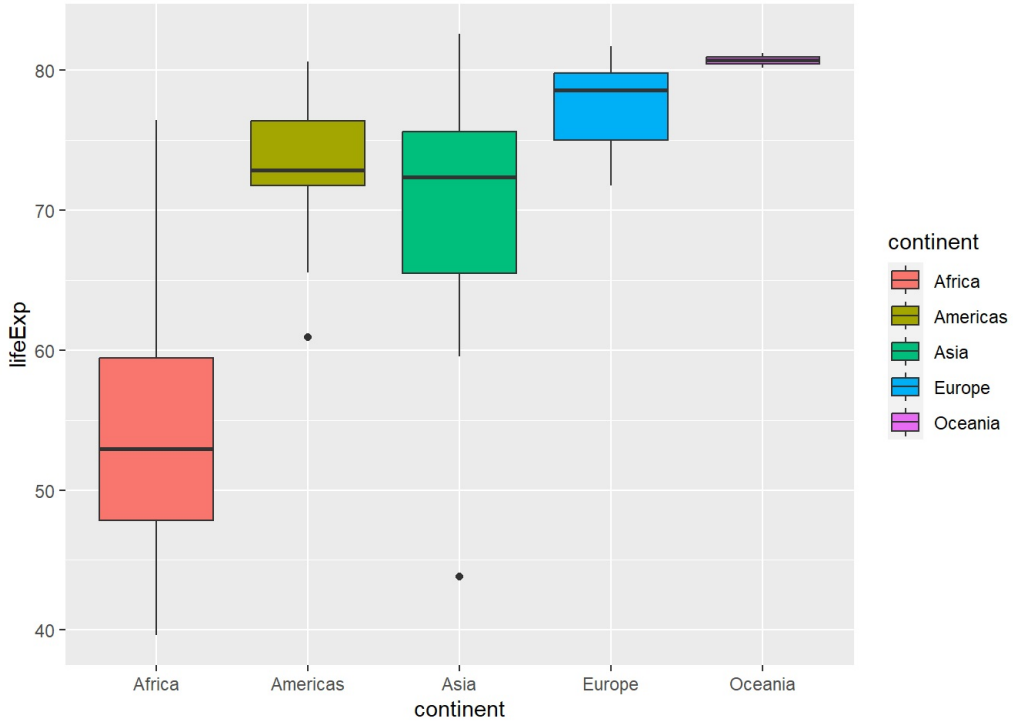


haciendo boxplot en continentes

```
g2 <- ggplot(data = gapminder2007,
             mapping = aes(x = continent,
                           y = lifeExp,
                           fill = continent)) +
  geom_boxplot()
```

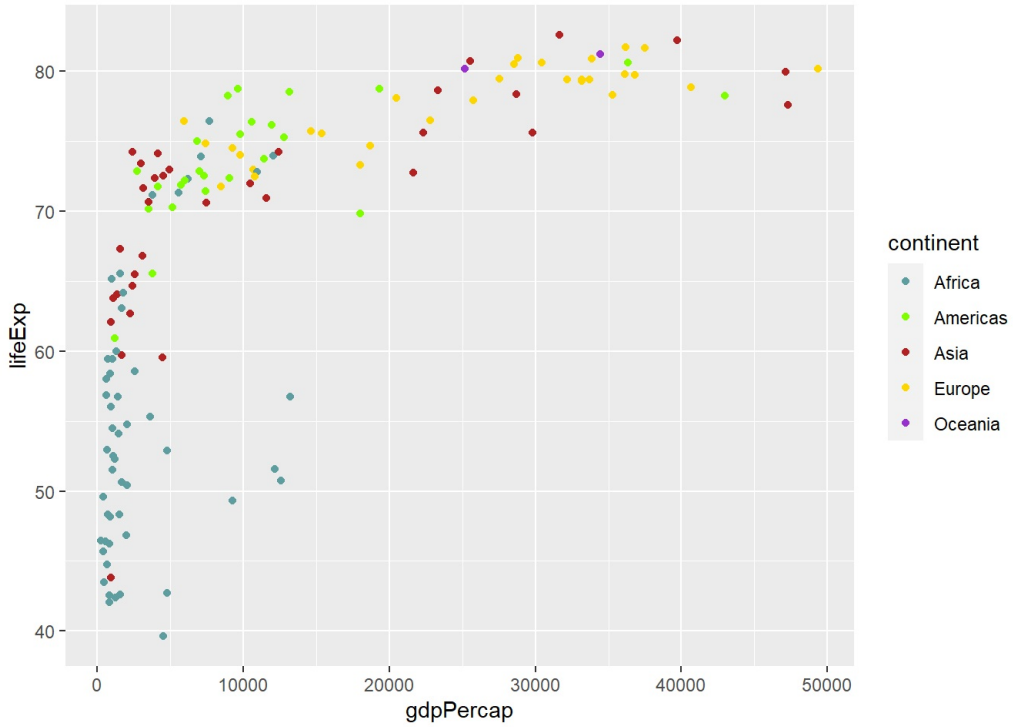
#ver g2

```
g2
```



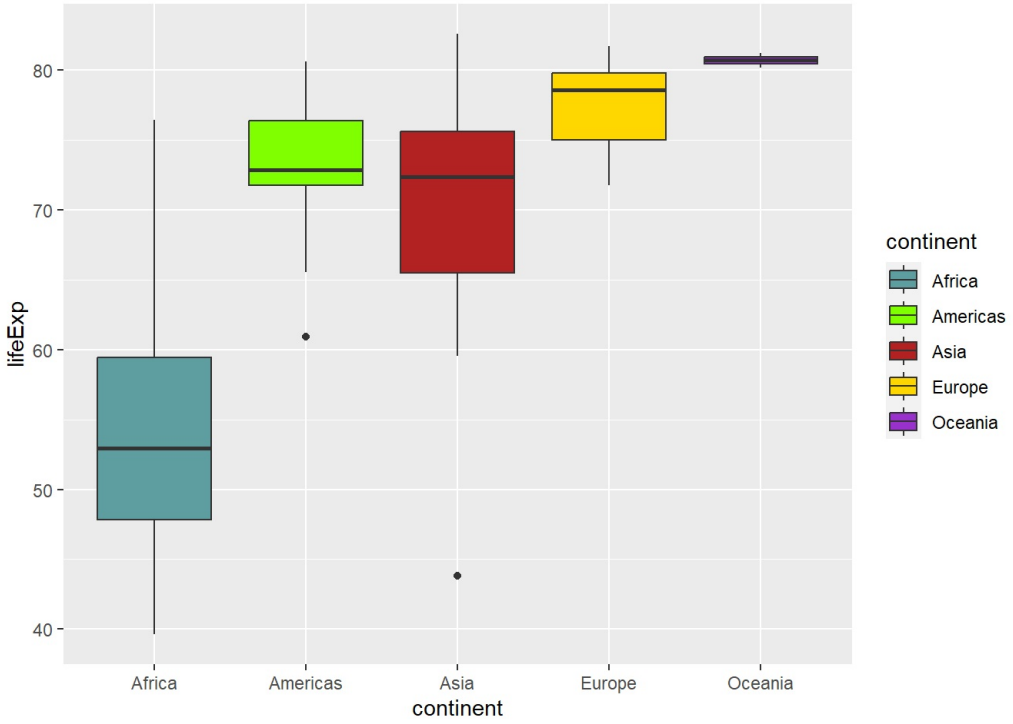
cambiando el color de los continentes g1

```
g1 + scale_color_manual (values = c('cadetblue',
                                    'chartreuse',
                                    'firebrick',
                                    'gold',
                                    'darkorchid'))
```



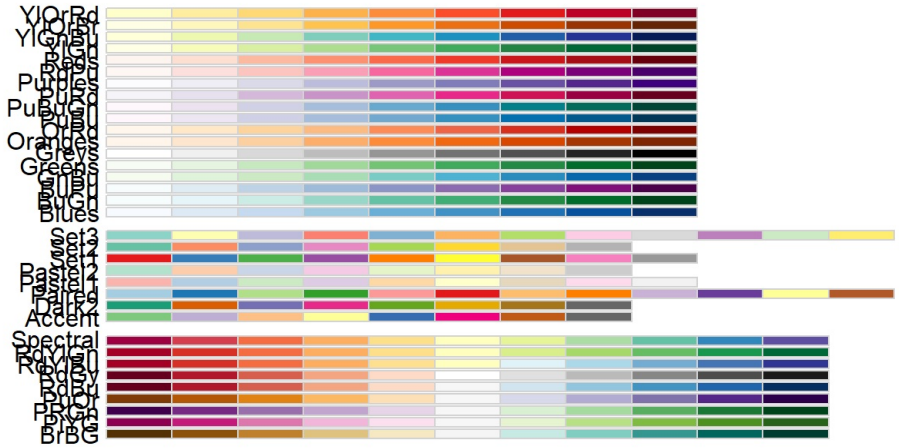
cambiando el color de los continentes g2

```
g2 + scale_fill_manual (values = c('cadetblue',
                                   'chartreuse',
                                   'firebrick',
                                   'gold',
                                   'darkorchid'))
```



cambiando colores con paleta RColorBrewer instalar RColorBrewer install.packages('RColorBrewer') para ver las paletas

```
library(RColorBrewer)
display.brewer.all()
```

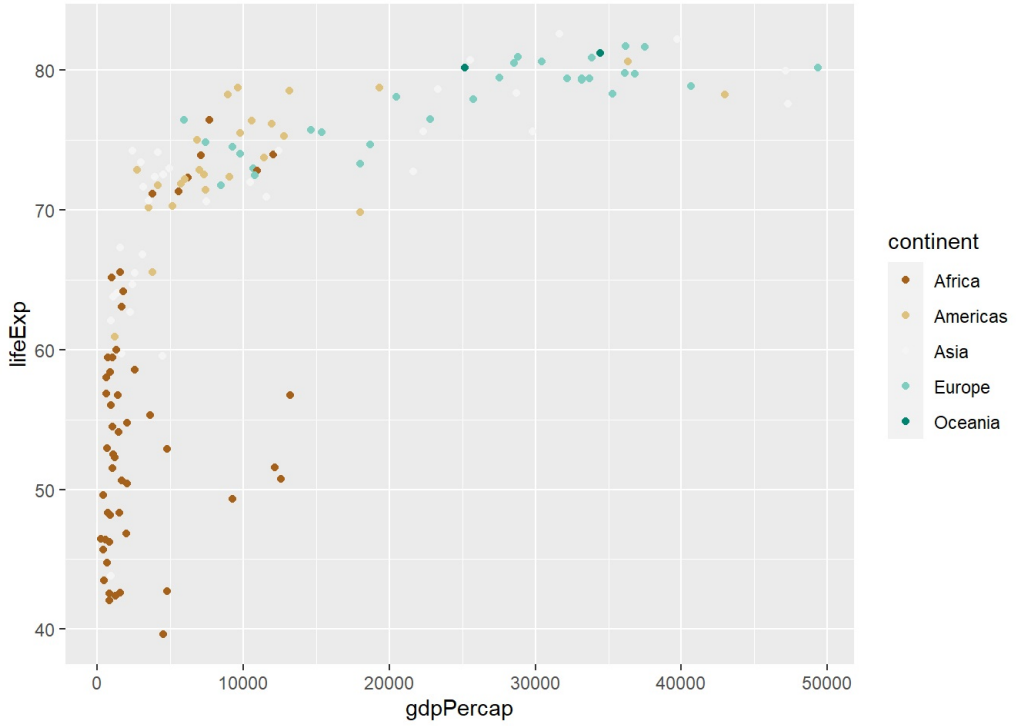


guardar como imagen width = 400,

height = 800

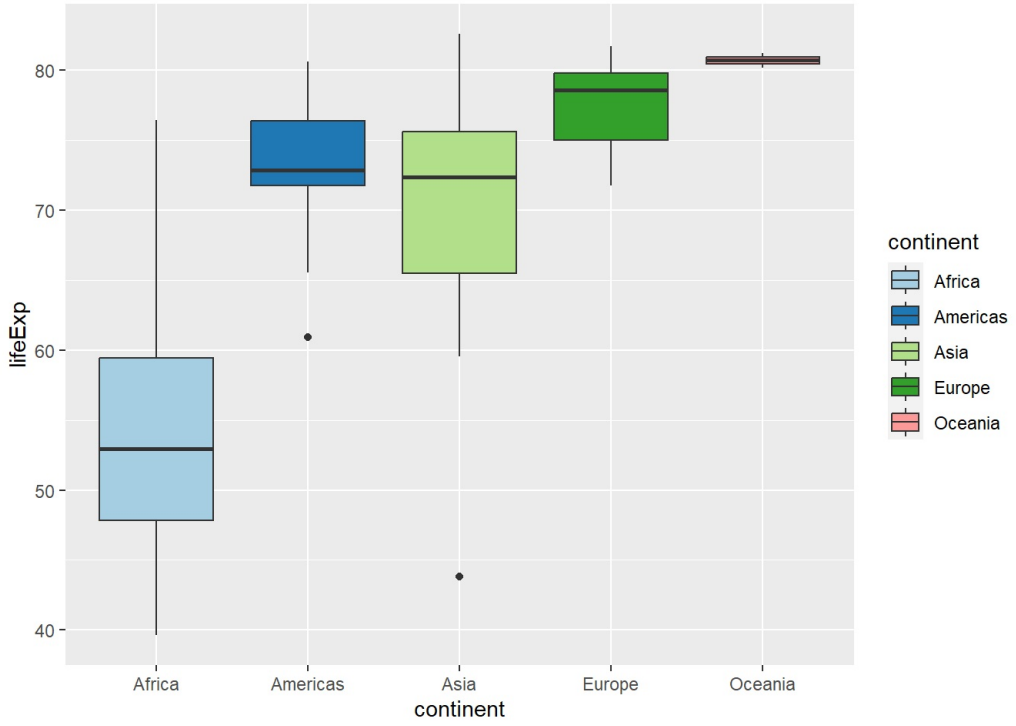
cambiando escala de color g1

```
g1 + scale_color_brewer(palette="BrBG")
```



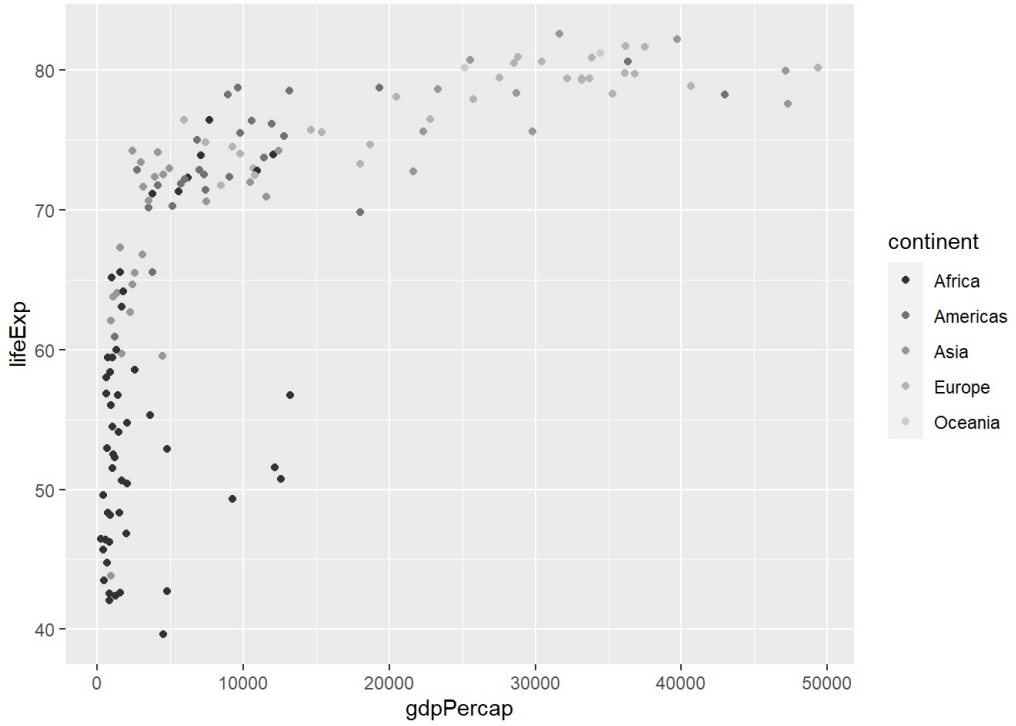
cambiando escala de color g2

```
g2 + scale_fill_brewer(palette="Paired")
```



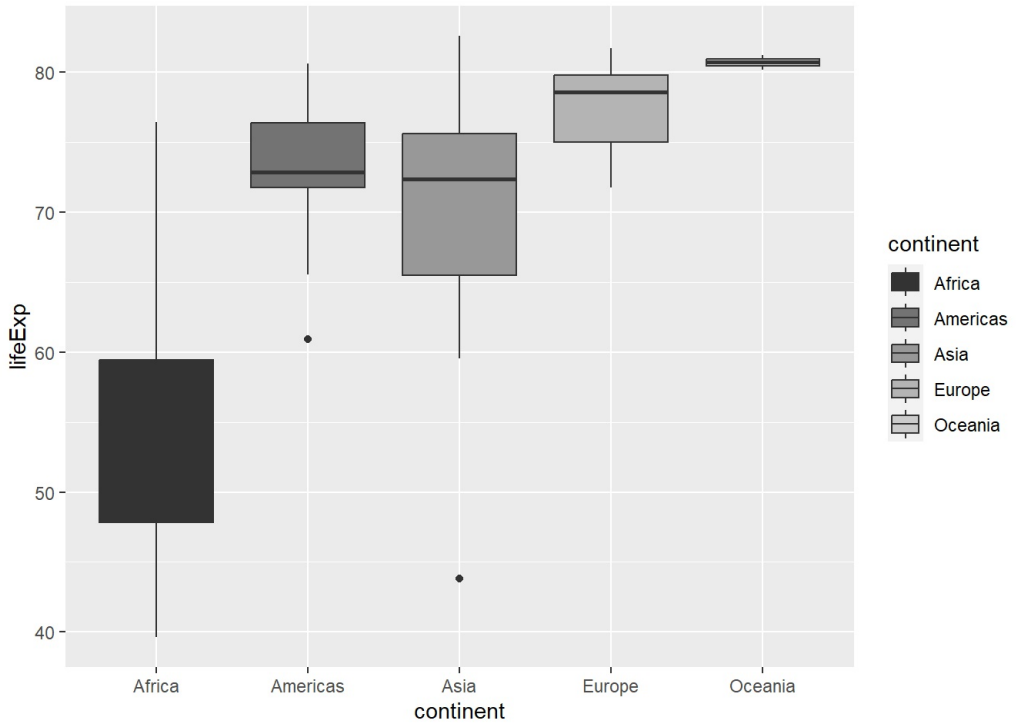
cambiando escala de grises g1

```
g1 + scale_color_grey()
```



cambiando escala de grises g2

```
g2 + scale_fill_grey()
```



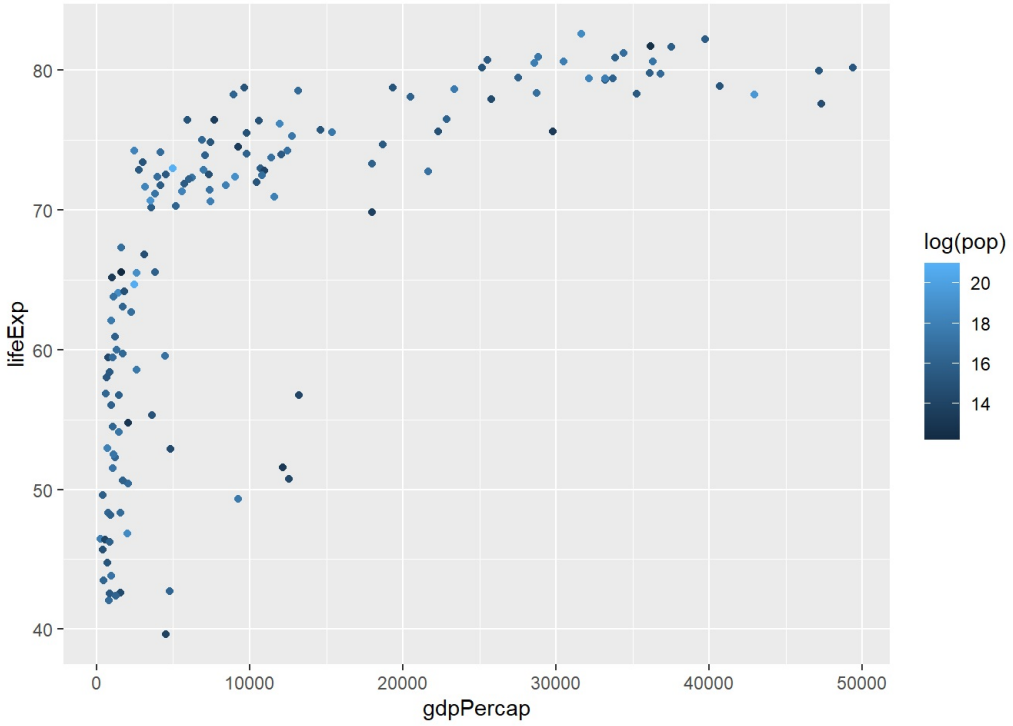
PARTE 2

Escala continua (variable continua) haciendo grafica de puntos por poblacion

```
g3 <- ggplot(data = gapminder2007,
             mapping = aes(x = gdpPercap,
                           y = lifeExp,
                           color = log(pop))) +
  geom_point()
```

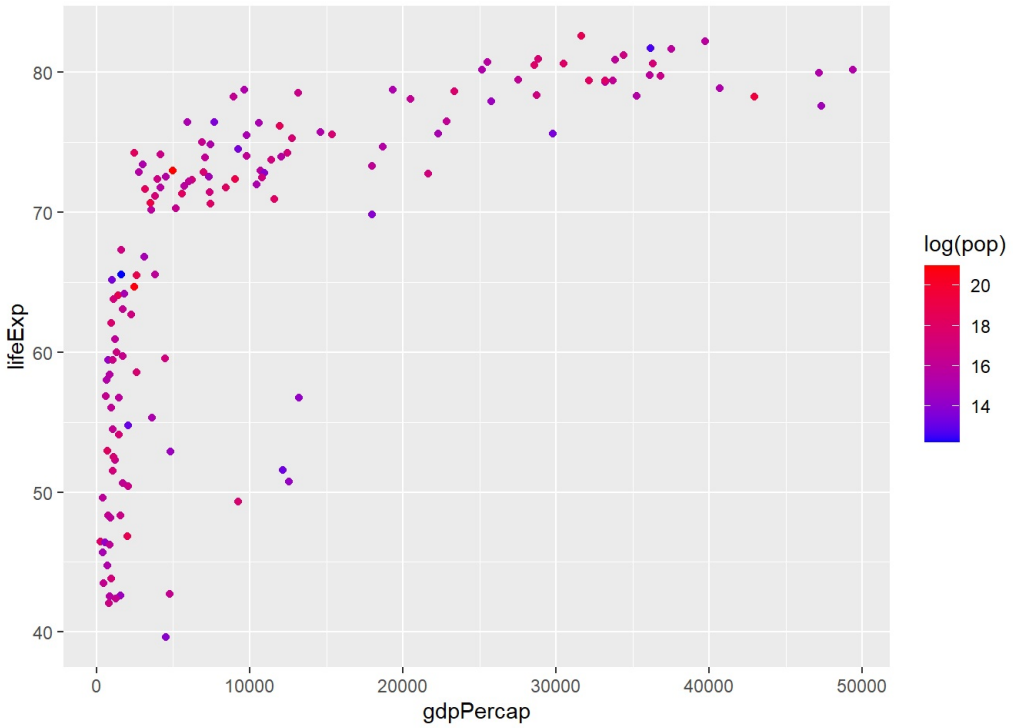
Ver g3

```
g3
```



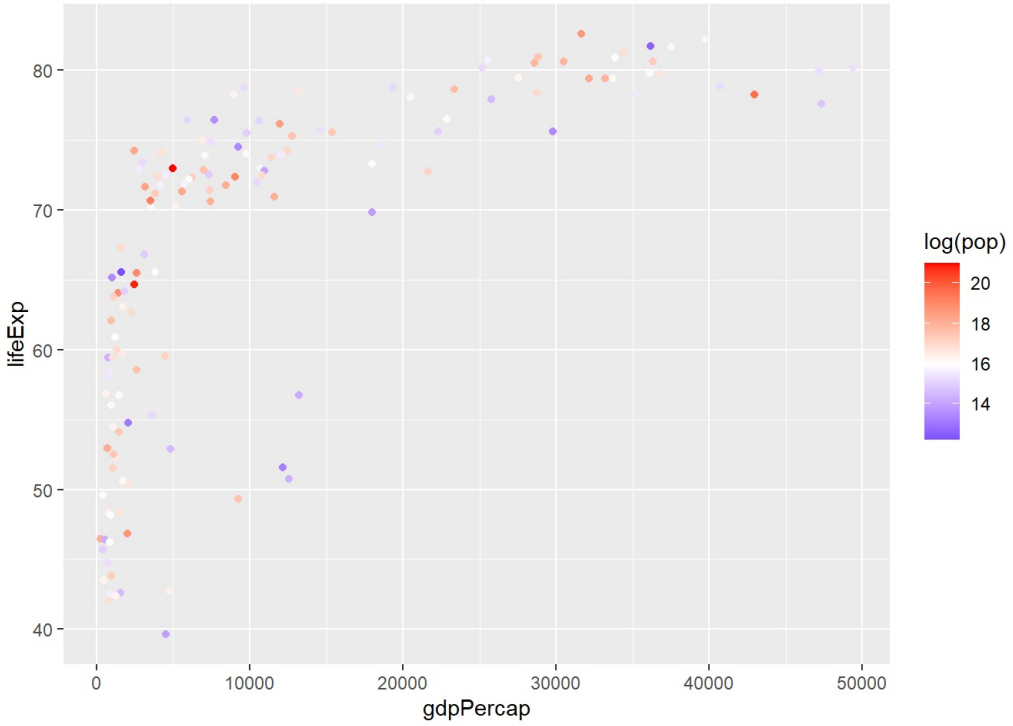
cambiando el color de los puntos según gradiente

```
g3 + scale_color_gradient(low="blue", high = "red")
```



cambiando el color de los puntos según gradiente asignar punto medio

```
g3 + scale_color_gradient2(midpoint = 16,
                           low="blue",
                           mid = "white",
                           high = "red",
                           space="Lab" )
```



haciendo histograma en poblacion

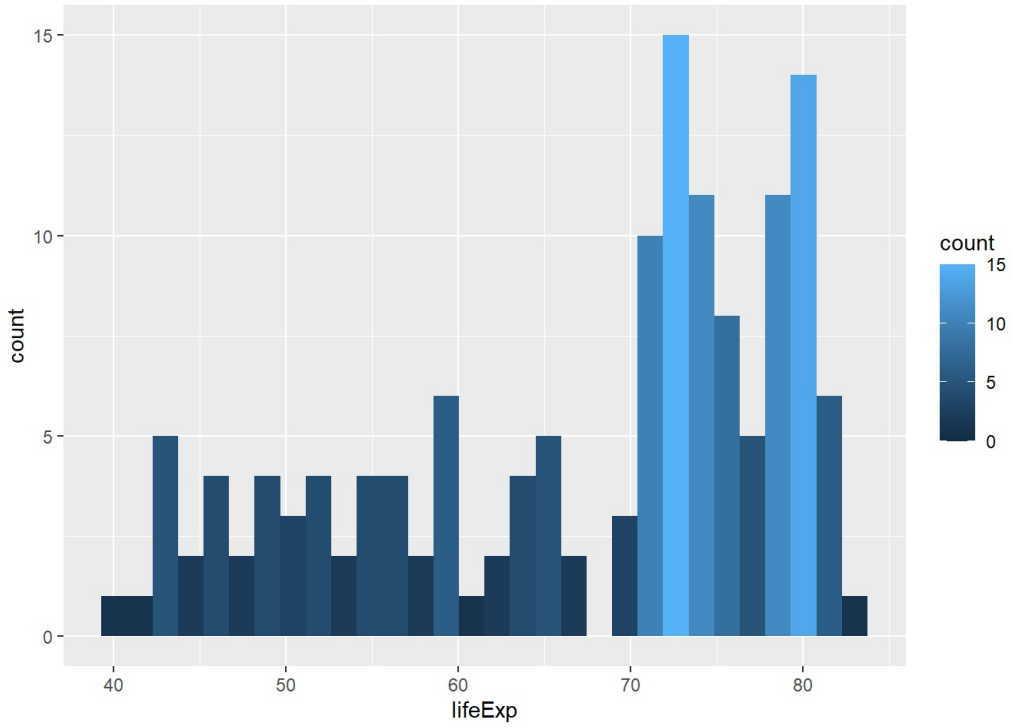
```
g4 <- ggplot(data = gapminder2007,
             mapping = aes(x = lifeExp,
                           fill = ..count..)) +
  geom_histogram()
```

Ver g4

```
g4
```

```
## Warning: The dot-dot notation (`..count..`) was deprecated in ggplot2 3.4.0.
## ℹ Please use `after_stat(count)` instead.
```

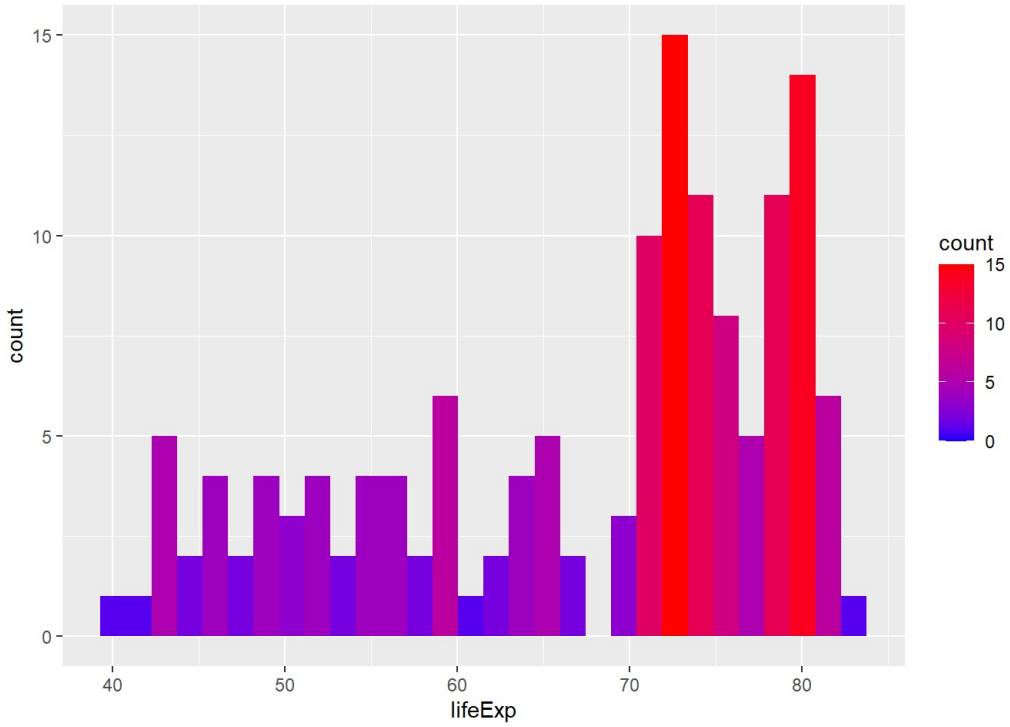
```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```



cambiando color de barras histograma

```
g4 + scale_fill_gradient(low="blue", high = "red")
```

```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```


15
10
5
0
count
40
50
60
70
80
lifeExp
count
15
10
5
0