

title: "LABS_46"

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LABORATORIO GRAFICA DE LINEAS

Hecho con gusto por la alumna JESSICA PAOLA AGUILAR SERVIN v2 LABORATORIO - Graficos en R con ggplot2 para Ciencia de Datos
Grafica de lineas en R

instalando paquetes `install.packages("gapminder")` `install.packages("ggplot2")`

Grafica de lineas en R cargar libreria ggplot2 y gapminder

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

cargando datos a entorno

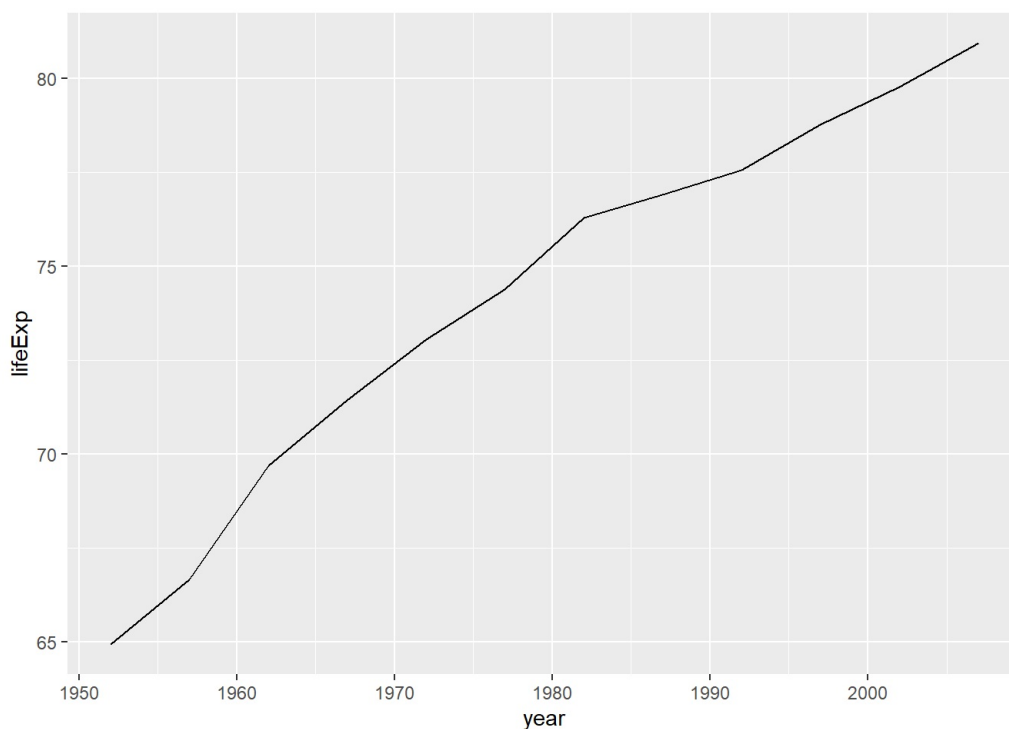
```
data("gapminder")
```

filtrando ESPAÑA

```
gapminderES = gapminder[gapminder$country == "Spain",]
```

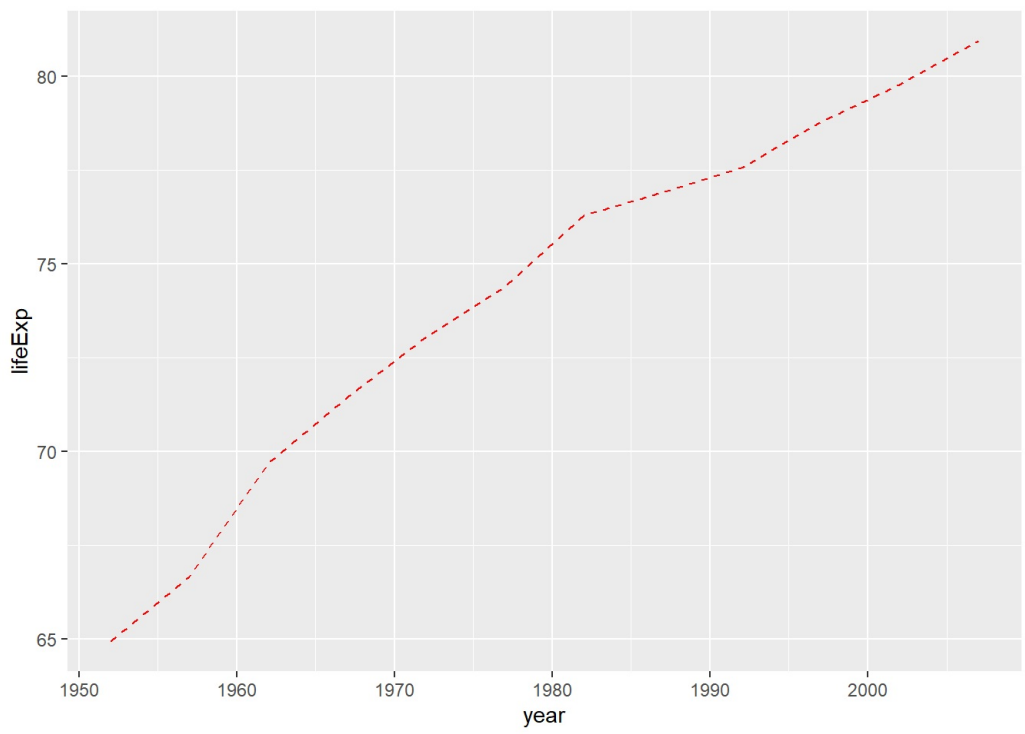
como hacer grafica de puntos con ggplot2

```
ggplot(data = gapminderES,
       mapping = aes (x=year,
                      y=lifeExp))+
  geom_line()
```



como modificar tipo de linea y color

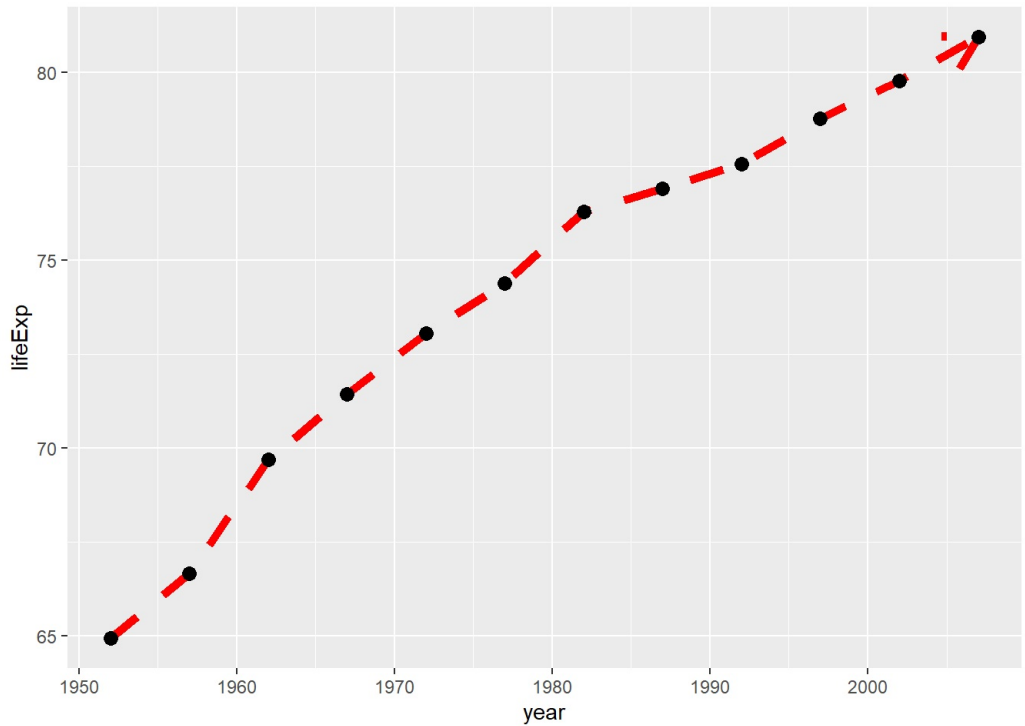
```
ggplot(data = gapminderES,
       mapping = aes (x=year,
                      y=lifeExp))+
  geom_line(linetype="dashed",
           color="red")
```



como modificar tamaño y hacer flecha

```
ggplot(data = gapminderES,
       mapping = aes (x=year,
                      y=lifeExp))+
  geom_line(linetype="dashed",
            color="red",
            arrow=arrow(),
            size=2)+
  geom_point(size=3)
```

Warning: Using `size` aesthetic for lines was deprecated in ggplot2 3.4.0.
i Please use `linewidth` instead.



como agregar puntos

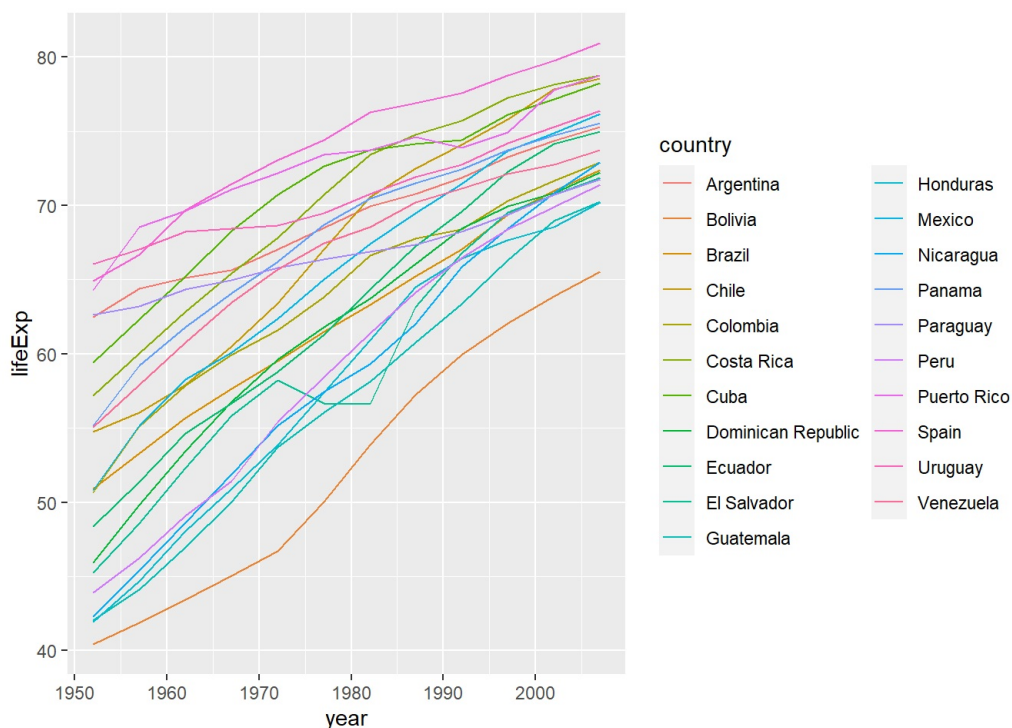
```
hispam_vec = c(
  'Argentina', 'Brazil', 'Bolivia', 'Chile', 'Colombia',
  'Costa Rica', 'Cuba', 'Dominican Republic',
  'Ecuador', 'El Salvador', 'Guatemala', 'Honduras',
  'Mexico', 'Nicaragua', 'Panama', 'Paraguay',
  'Peru', 'Uruguay',
  'Spain', 'Puerto Rico',
  'Venezuela' )
```

gapminder pais de habla hispana crear un objeto df

```
gapminder_hisp = gapminder [gapminder$country %in% hispam_vec,]
```

probando diferentes aesthetics

```
ggplot(data = gapminder_hisp,
       mapping = aes (x=year,
                      y=lifeExp,
                      color=country)) +
  geom_line()
```



exportar dataframe

```
write.csv(gapminder_hisp, file = "gapminder_hisp.csv")
write.csv(gapminderES, file = "gapminderES.csv")
write.csv(gapminder, file = "gapminder.csv")
```