```
title: "grafica linea lab34" author: "Luz Yolanda Rivera" date: "9/30/2021" output: html_document
#instalar paquete con los datos #install.packages("gapminder") #install.packages("ggplot2")
#Cargar en librería ggplot2 y gapminder
 library(ggplot2)
 library(gapminder)
#cargando datos a entorno
 data("gapminder")
#Filtrando España
 gapminderES= gapminder [gapminder$country == "Spain",]
#como hacer gráfica de puntos con ggplot2
 ggplot( data = gapminderES,
         mapping = aes(x = year,
                       y = lifeExp)) +
   geom_line()
   80 -
   75 -
   70 -
                                1970
                                                            1990
                  1960
                                              1980
                                                                         2000
     1950
                                             year
#modificar el tipo de línea y color
 ggplot( data = gapminderES,
         mapping = aes(x = year,
                       y = lifeExp)) +
   geom_line(linetype = "dashed" ,
              color = "red")
   75 -
lifeExp
   70 -
                                1970
                                              1980
                                                            1990
                                                                         2000
                   1960
     1950
                                             year
#modificar tamaño y hacer flecha
 ggplot( data = gapminderES,
         mapping = aes(x = year,
                        y = lifeExp)) +
   geom_point( size=3) +
   geom_line(linetype = "dashed" ,
              color = "red",
             size = 2,
              arrow = arrow())
   80 -
   75 -
lifeExp
   70 -
                                1970
                                                                         2000
                  1960
                                              1980
                                                            1990
     1950
                                             year
De mi base de datos, solo quiero ver a los paises
latinoamericanos
 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")
#crear y un objeto data frame
 gapminder_hisp = gapminder[ gapminder$country %in% hispam_vec,]
#gráfica con la nueva base de datos
 ggplot( data = gapminder_hisp,
         mapping = aes(x = year,
                        y = lifeExp,
                        color = country)) +
   geom_line()
   80 -
                                                        country
```

Argentina

Bolivia

Brazil

ColombiaCosta Rica

Cuba

Ecuador

El Salvador

Guatemala

Dominican Republic

Chile

70 **-**

40 -

1950

1960

1970

#exportar el dataframe de los países hispanoparlantes

1980

year

write.csv(gapminder_hisp, file = "gapminder_hisp.csv")

1990

2000

Honduras

Nicaragua

Puerto Rico

Panama Paraguay

Peru

Spain

Uruguay

Venezuela

Mexico