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

```r
library(ggplot2)
library(gapminder)
```
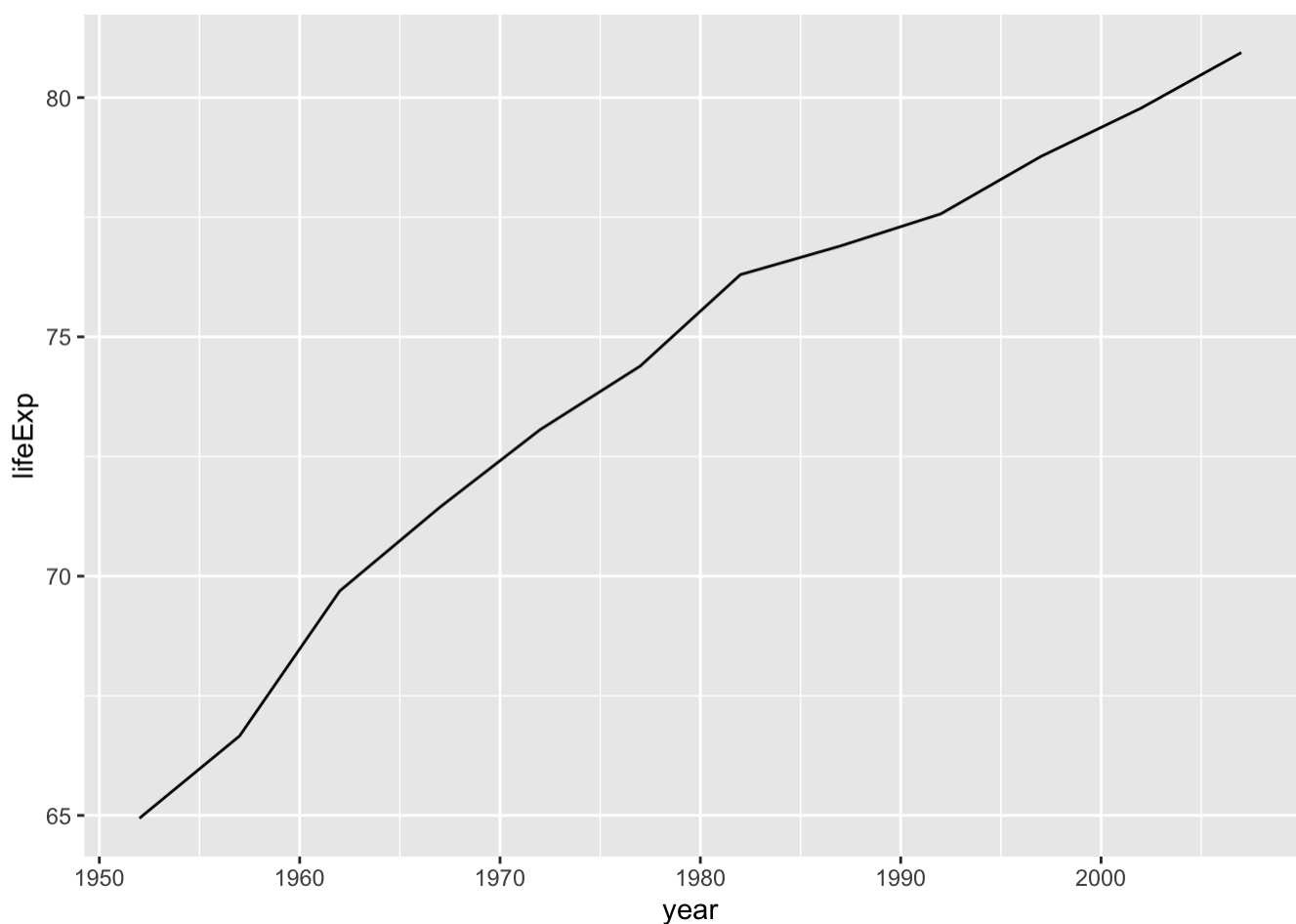
#cargando datos a entorno

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

#Filtrando España

```r
gapminderES= gapminder [gapminder$country == "Spain",]
```
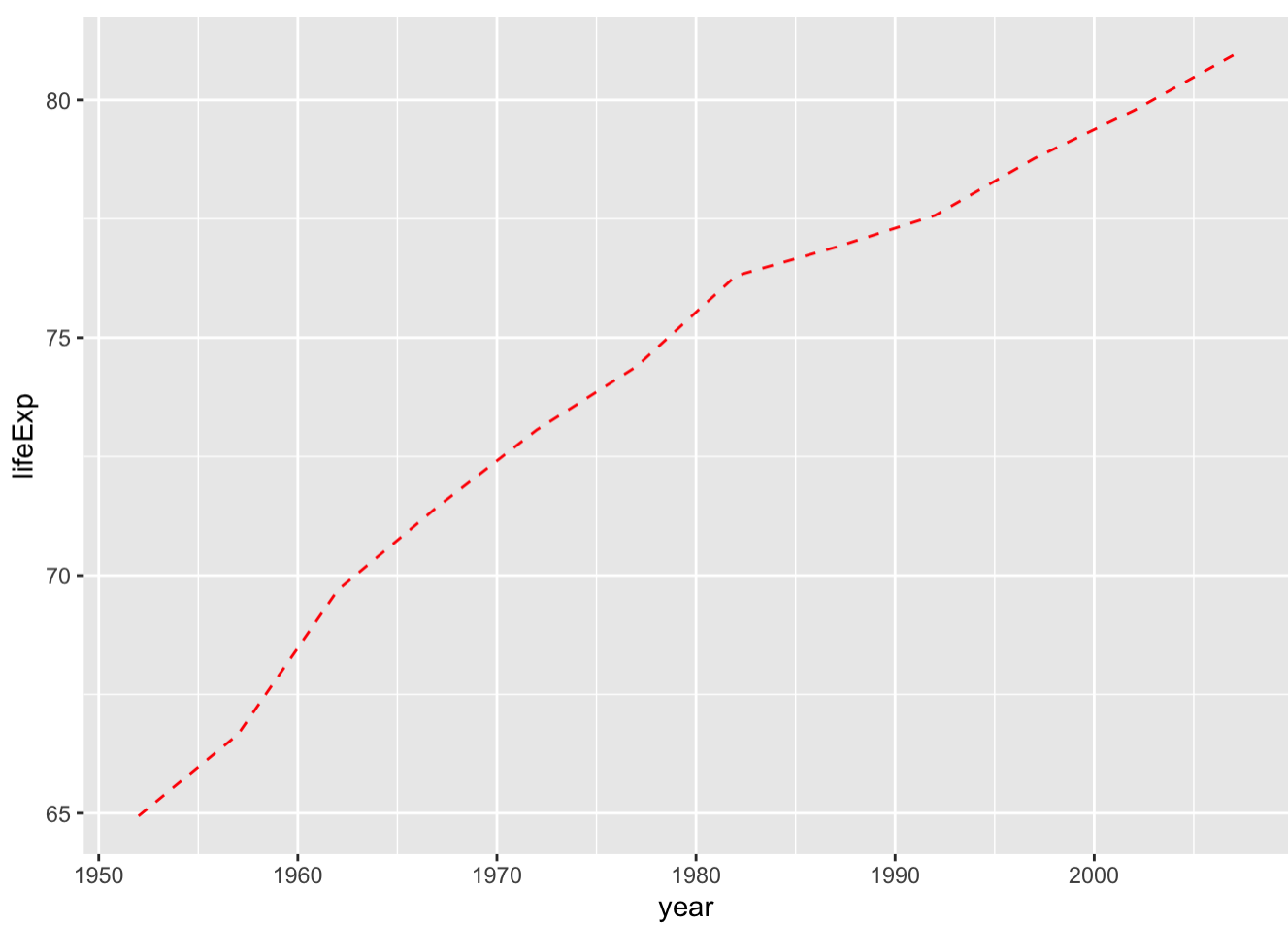
#como hacer gráfica de puntos con ggplot2

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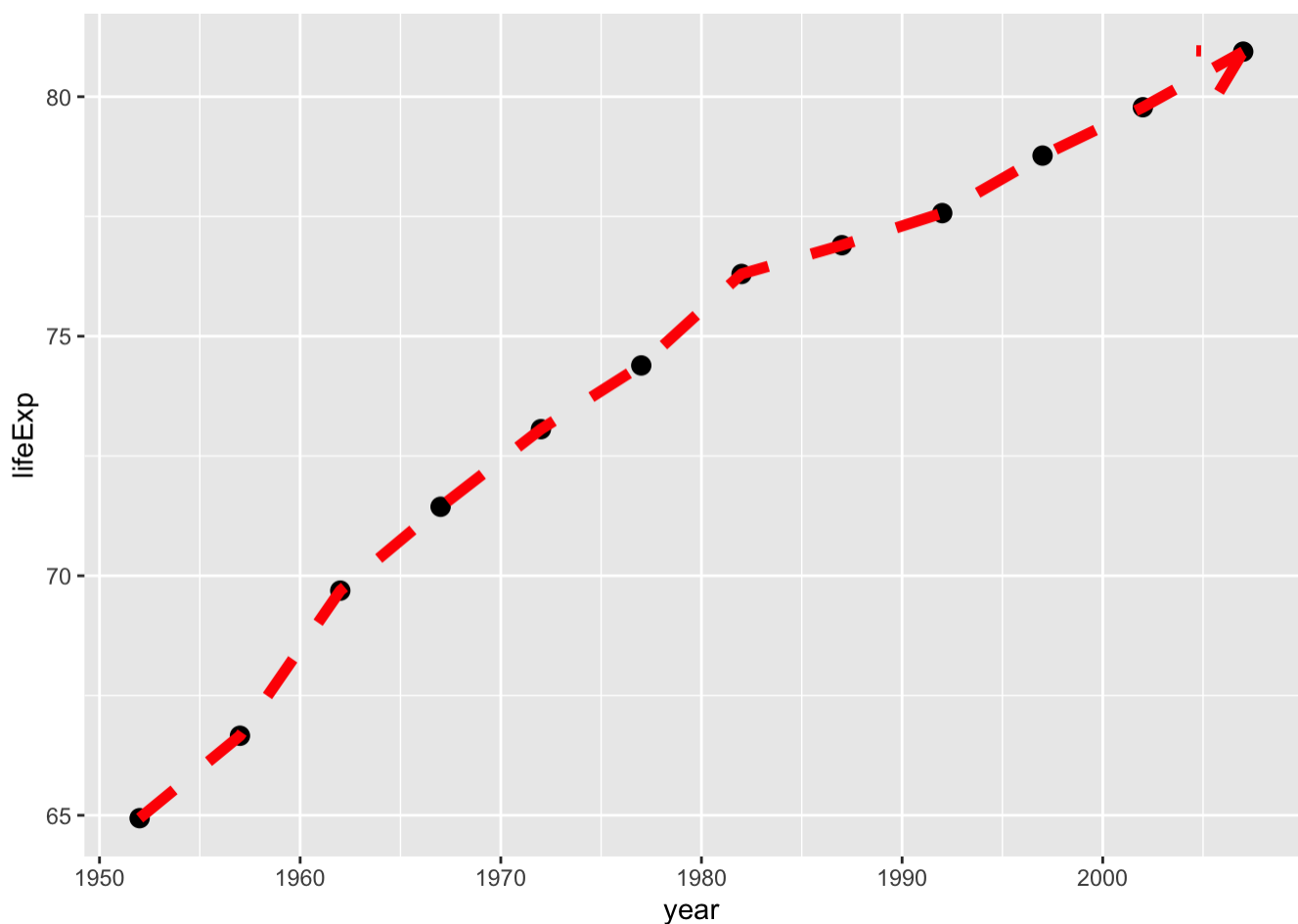

#modificar el tipo de línea y color

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


#modificar tamaño y hacer flecha

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


De mi base de datos, solo quiero ver a los paises latinoamericanos
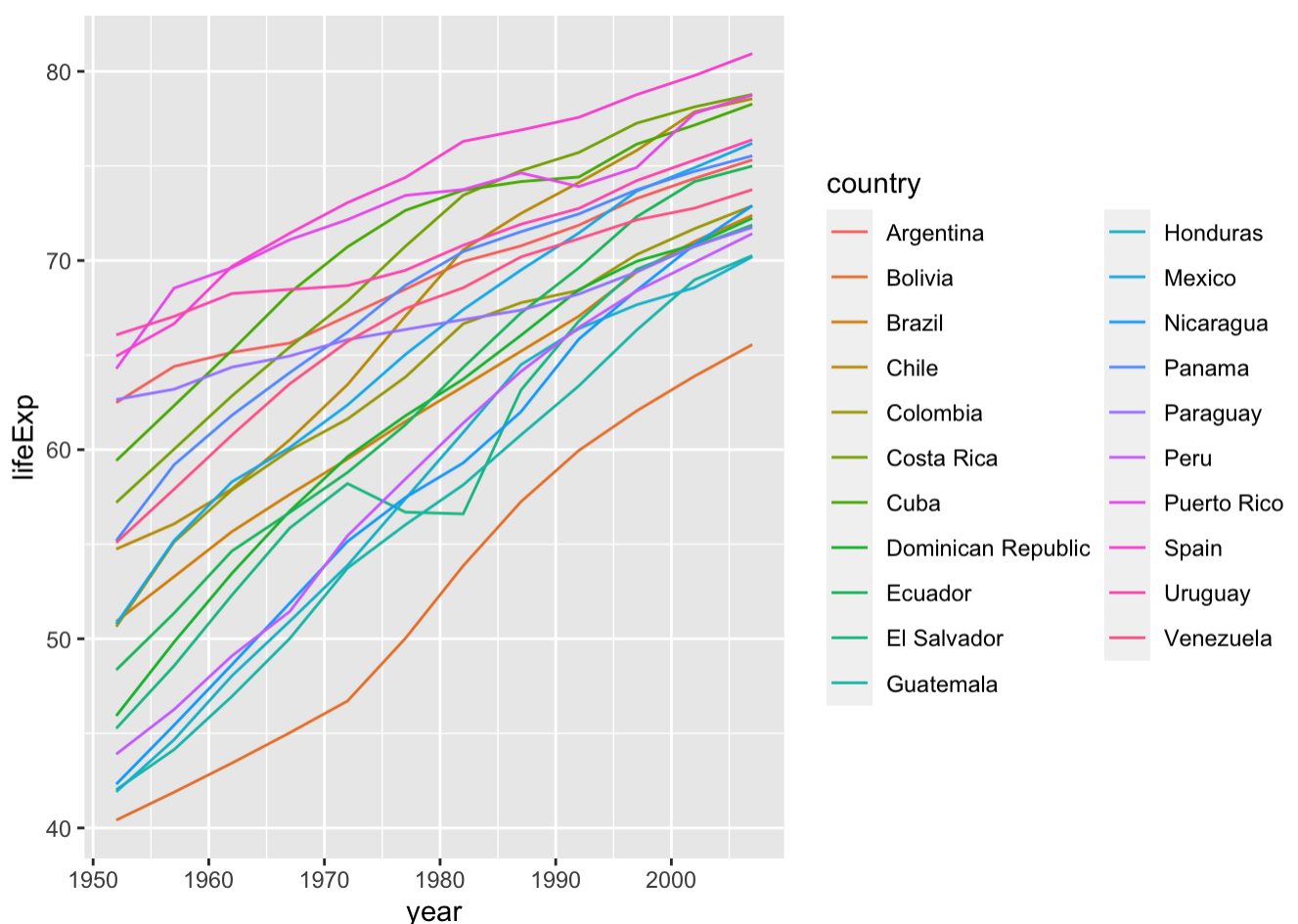
```r
hispam_vec = c(
  "Argentina", "Brazil", "Bolivia", "Chile", "Colombia",
  "Costa Rica", "Cuba", "Dominican Republic",
  "Ecuador", "El Salvador", "Guatemala", "Honduras",
  "Mexico", "Nicaragua", "Panama", "Paraguay",
  "Peru", "Uruguay",
  "Spain", "Puerto Rico",
  "Venezuela")
```

#crear y un objeto data frame

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

#gráfica con la nueva base de datos

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


#exportar el dataframe de los países hispanoparlantes

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