

Introducción a R

Aplicaciones a la enseñanza de la Estadística

IV - Encuentro Colombiano de Educación Estocástica

ACEdEst

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Instalación R y RStudio



<https://www.r-project.org/>

Descargar e instalar R y RStudio

<https://www.youtube.com/watch?v=Nmu4WPdJBRO>

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<https://www.rstudio.com/products/rstudio/download/>

Resumen

- **Instalar R y RStudio**

- **Variable:**

- id,cc, telefono, email, nombre,
- edad, talla, nacionalidad

- **Tipos de variables**

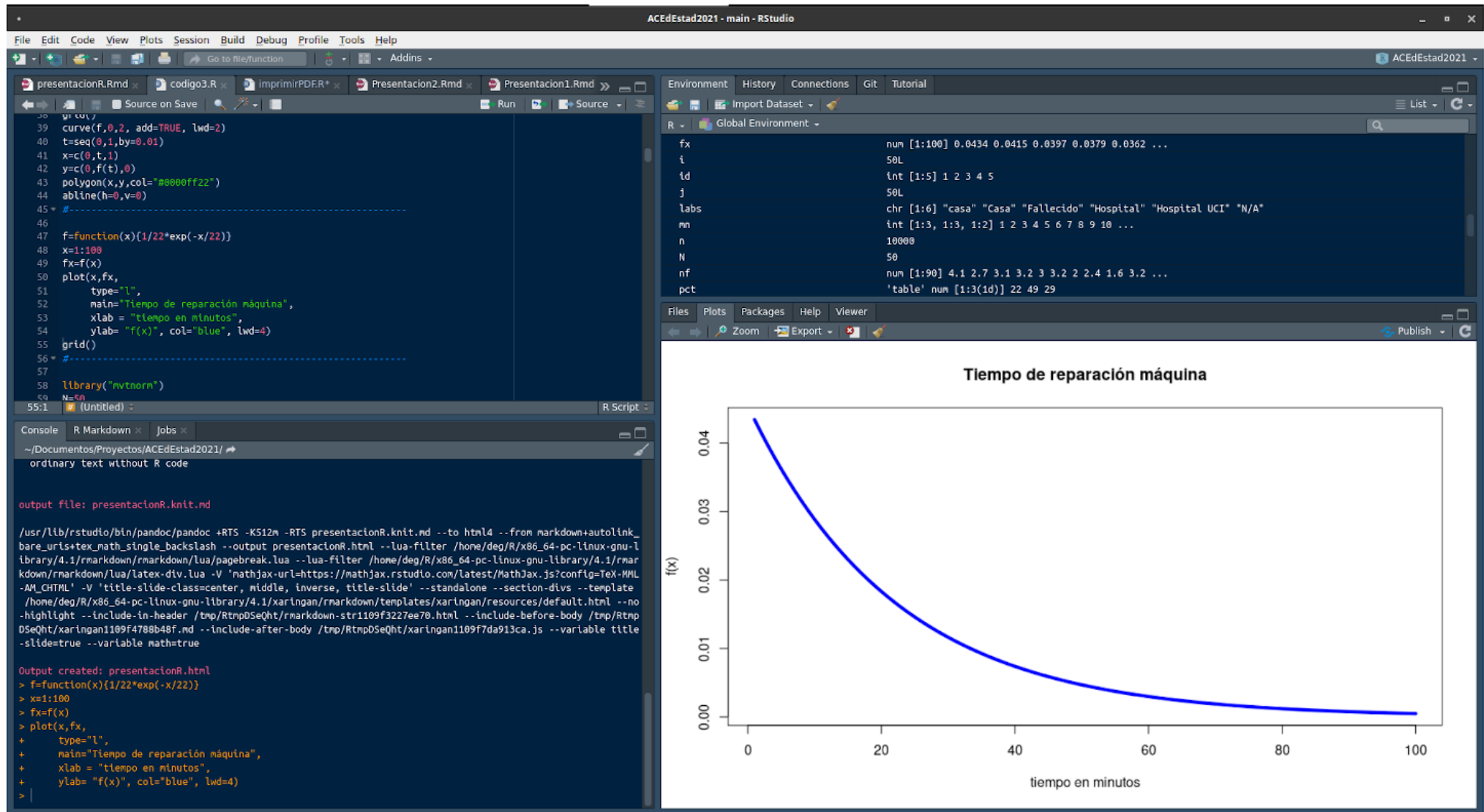
- Cualitativas
 - Escala nominal : `table(x)` `pie(table(x))`
 - Escala ordinal : `table(x)`
`barplot(table(x))`
- Cuantitativas :
 - `hist(x)`,
 - `boxplot(x)`,
 - `plot(x,y)`,
 - `density(x)`

- **Tipo de objetos**

- Vectores : `x = c(1,2,3,4,5,6)`
- Matrices : `m = matrix(1:9, nrow=3)`
- Array : `a = array(1:27, dim=c(3,3,3))`
- Factor: `f = c("A","A","B","B", "C","C")`
- Listas : `l=list(x,m,a,f)`
- Funciones: `fx=function(x){(x^3+x^2-2*x+8)}`
 - `fx(3)`

Importar datos

- **Dataset de R** : `data(iris)` , `data(cars)`
- **Importar datos en DD**
 - `library(xlsx)`
 - `data=read.xlsx("mibase.xlsx")`
 - `data=read.csv("mibase.csv")`
 - `library(foreign)`
 - `data=read.dta("midata.dta")`
- **De manera automatica**
 - `library(RSocrata)`
 - `token ="ew2rEMuESuzWPqMkyPfOSGJgE"`
 - `data=read.socrata("https://www.datos.gov.co/resource/gt2j-8ykr.json", app_token = token))`



R online

- rdrv.io
 - <https://rdrv.io/snippets/>
- codingground
 - https://www.tutorialspoint.com/execute_r_online.php
- RStudio Cloud
 - <https://rstudio.cloud/project/577815>
- myCompiler
- <https://www.mycompiler.io/new/r>

RStudio portable

<https://support.rstudio.com/hc/en-us/articles/200534467-Creating-a-Portable-Version-of-RStudio-for-a-USB-Drive>

R

<https://www.r-project.org/>

RStudio

<https://www.rstudio.com/products/rstudio/download/#download>

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