



# PRACTICA 1: REGRESSIÓ

---

Pol Espinasa Vilarrasa  
Marc Gonzalez Amores

# INTRODUCCIÓ

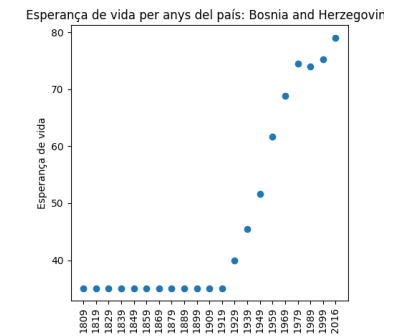
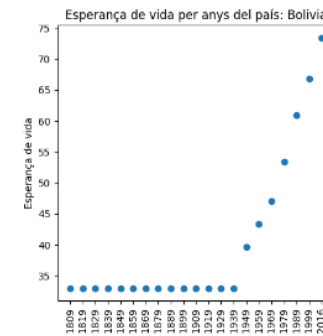
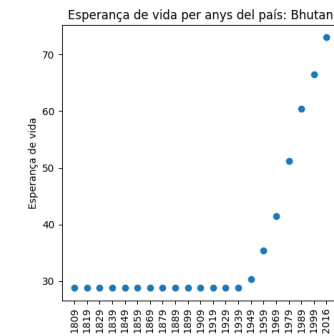
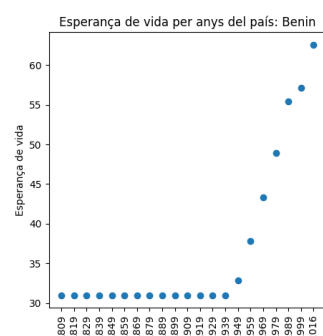
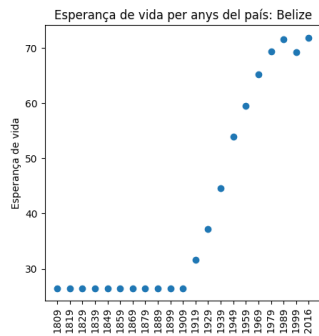
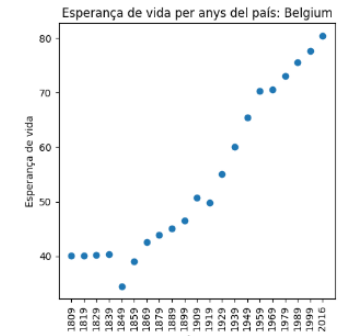
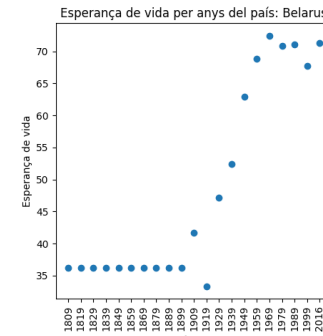
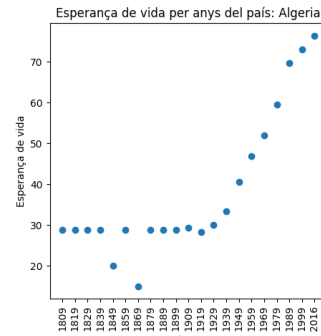
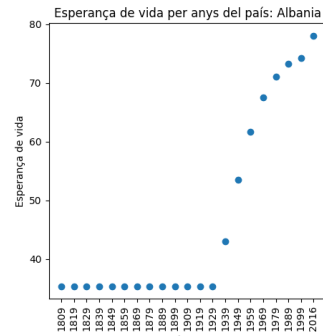
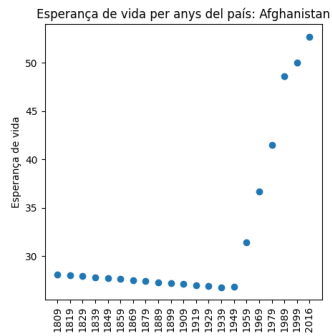
<https://www.kaggle.com/amarpandey/world-life-expectancy-18002016>

Llibreries utilitzades:

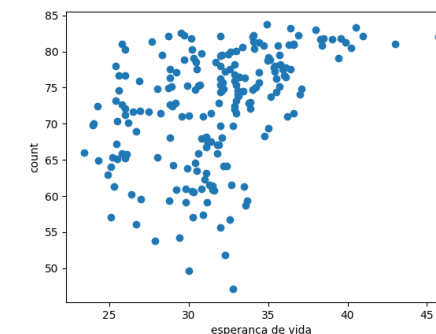
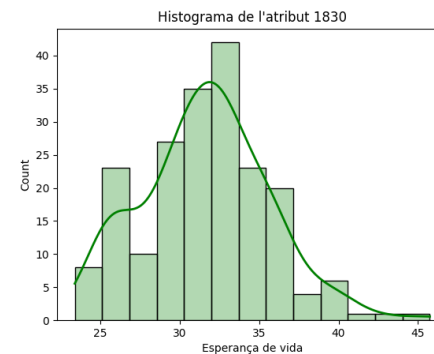
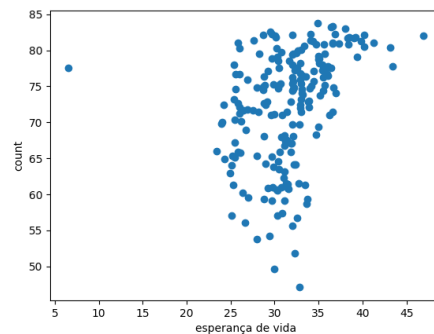
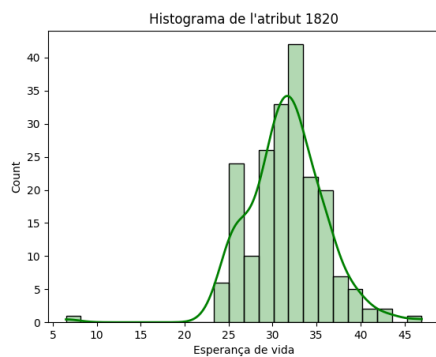
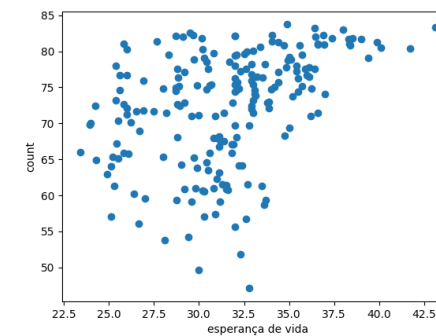
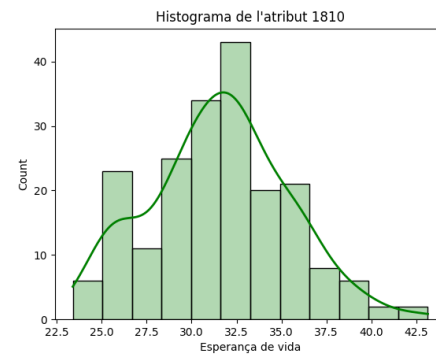
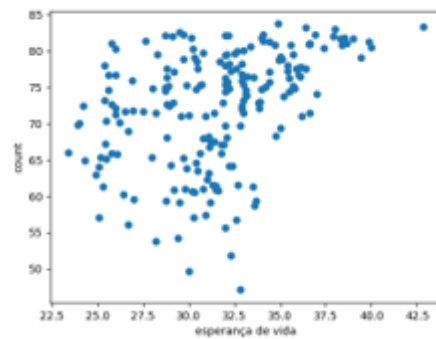
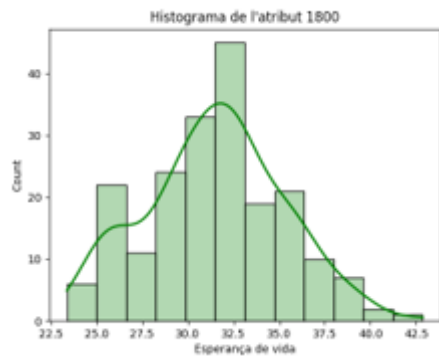
- Numpy
- Pandas
- Matplotlib
- Sklearn
- Scipy

[illegible]

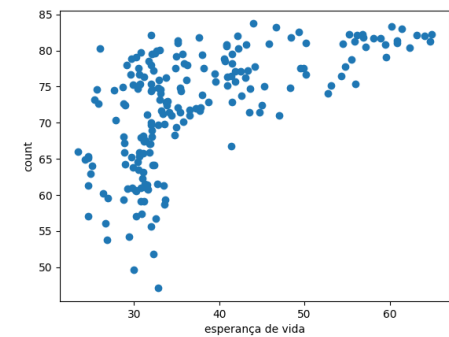
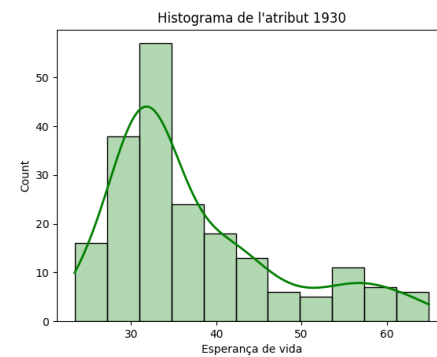
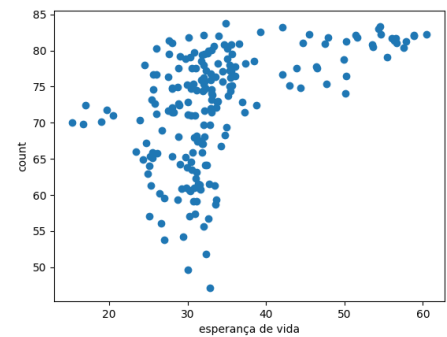
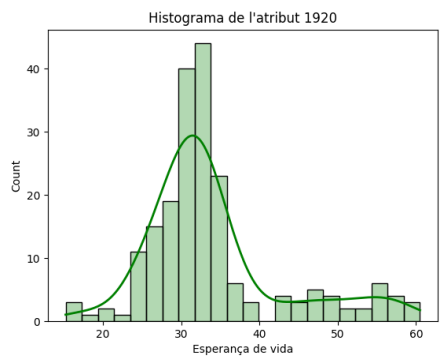
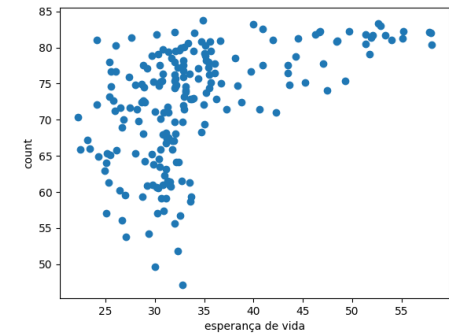
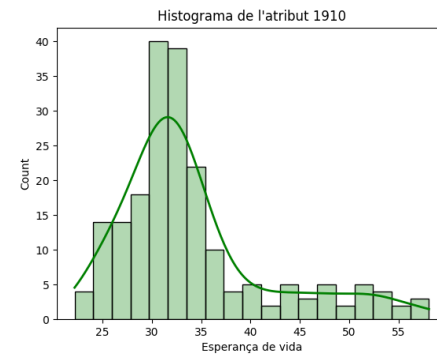
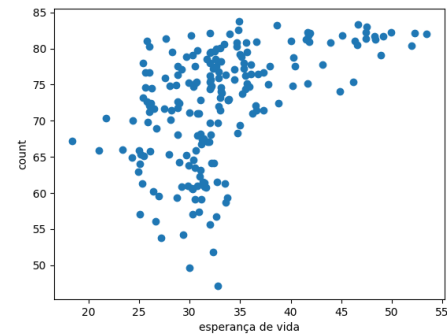
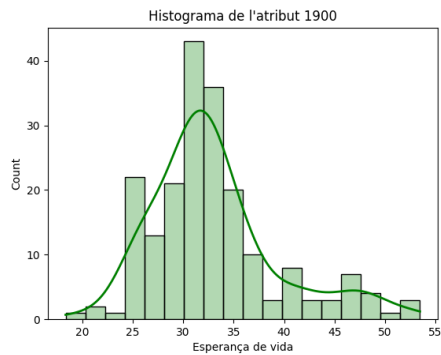
# GRÀFICS DE DISPERSIÓ



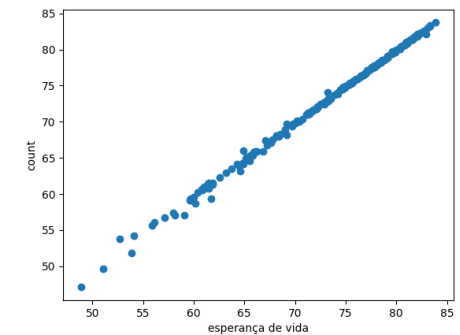
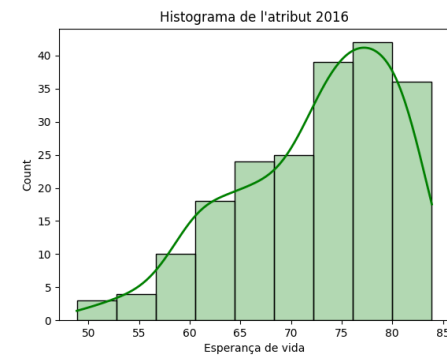
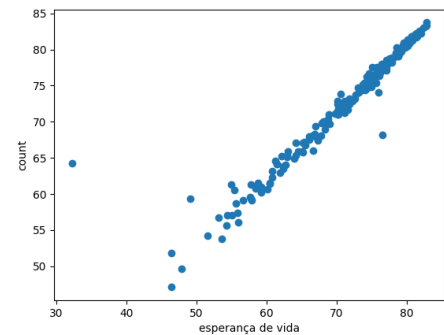
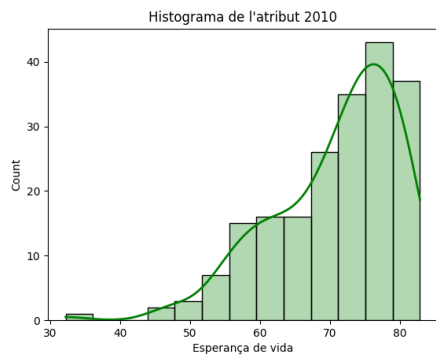
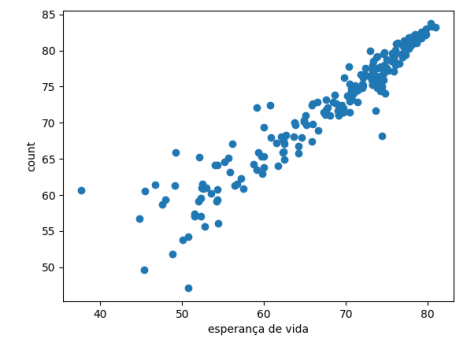
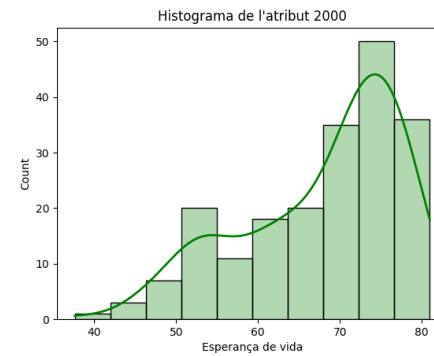
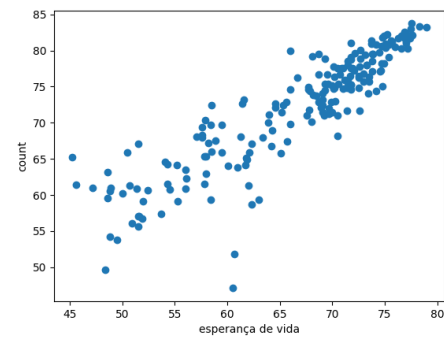
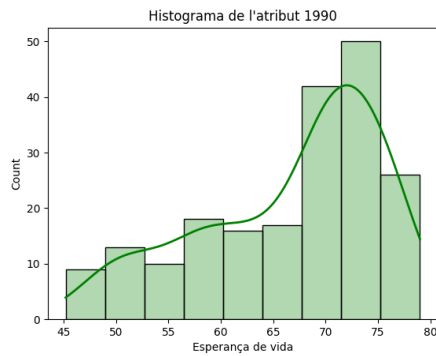
# ANÀLISI NUMÈRIC DELS ATRIBUTS



# ANÀLISI NUMÈRIC DELS ATRIBUTS



# ANÀLISI NUMÈRIC DELS ATRIBUTS

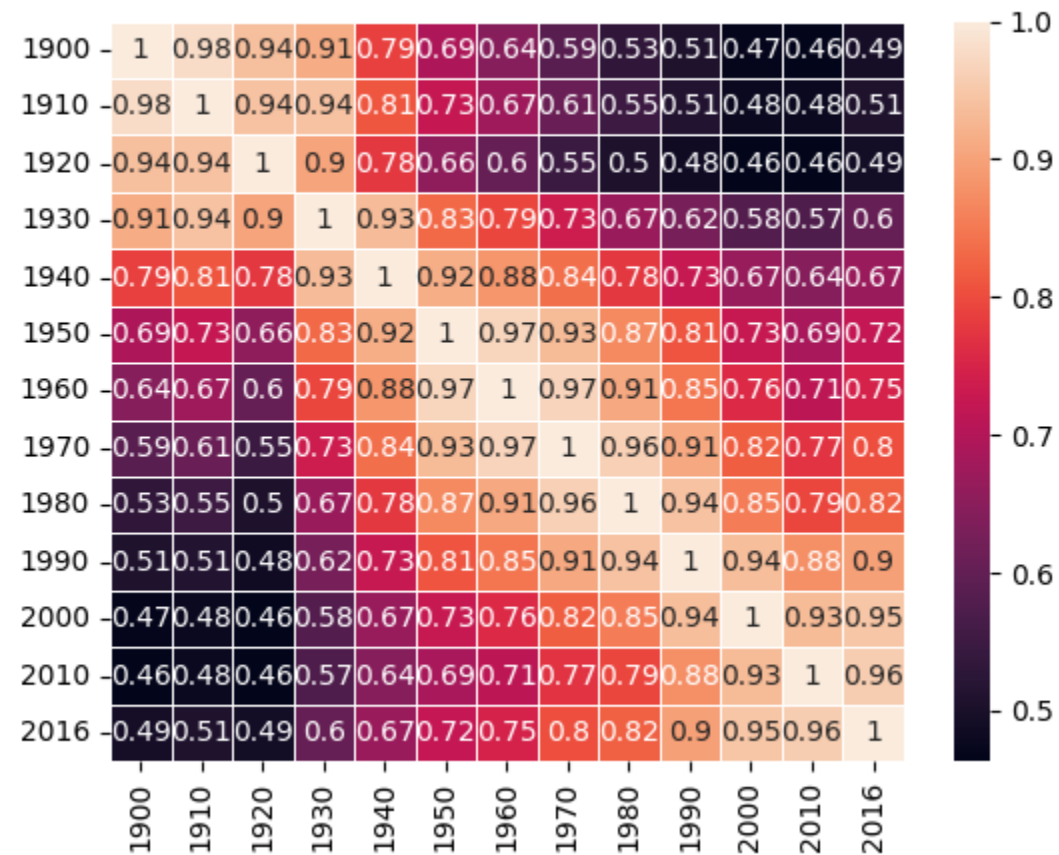


# TEST DE SHAPIRO

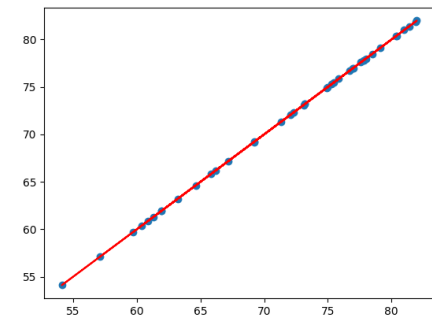
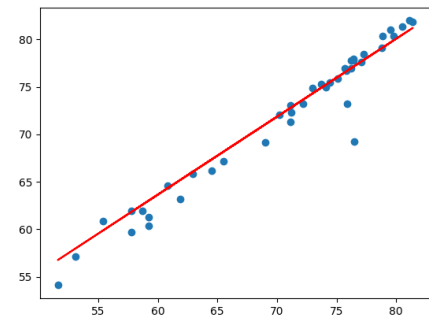
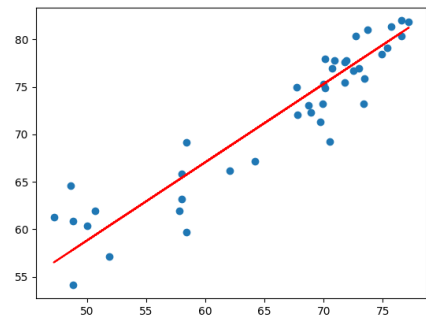
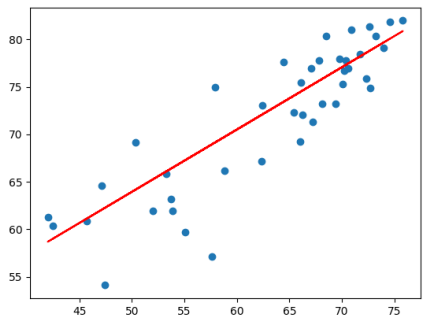
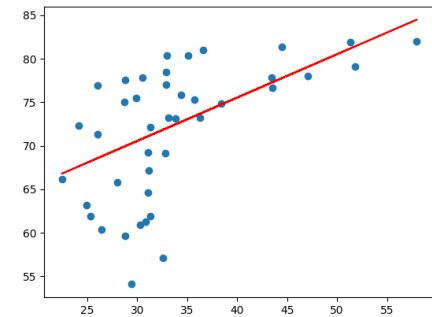
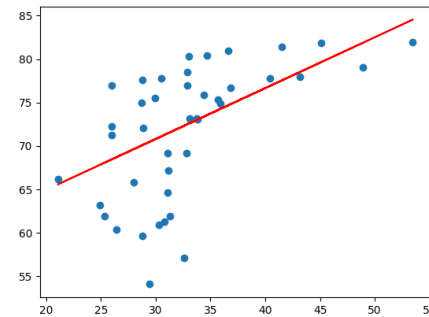
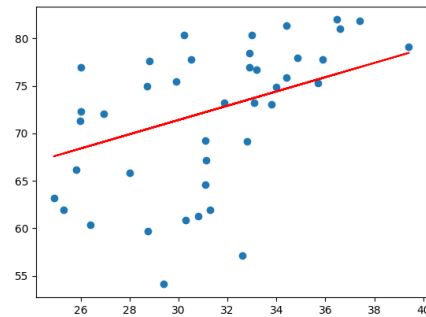
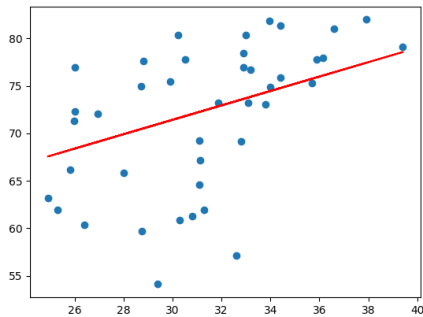
Atribut 1 Any: 1800 -->	Estadistic: 0.9887773394584656	P-Valor: 0.11583148688077927
Atribut 2 Any: 1801 -->	Estadistic: 0.9861128926277161	P-Valor: 0.04586431756615639
Atribut 3 Any: 1802 -->	Estadistic: 0.9872831106185913	P-Valor: 0.06893709301948547
Atribut 4 Any: 1803 -->	Estadistic: 0.9921090006828308	P-Valor: 0.34993278980255127
Atribut 5 Any: 1804 -->	Estadistic: 0.9880924820899963	P-Valor: 0.0913628488779068
Atribut 6 Any: 1805 -->	Estadistic: 0.983538806438446	P-Valor: 0.018868504092097282
Atribut 7 Any: 1806 -->	Estadistic: 0.9772395491600037	P-Valor: 0.0023758108727633953
Atribut 8 Any: 1807 -->	Estadistic: 0.9863826632499695	P-Valor: 0.050377920269966125
Atribut 9 Any: 1808 -->	Estadistic: 0.9765198230743408	P-Valor: 0.00189547601621598
Atribut 10 Any: 1809 -->	Estadistic: 0.97993004322052	P-Valor: 0.005640340968966484



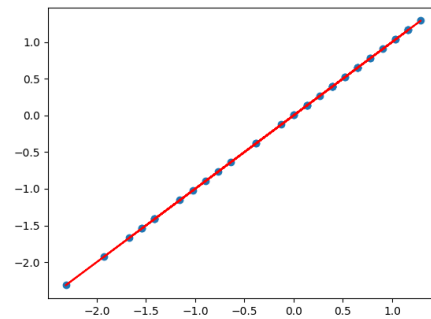
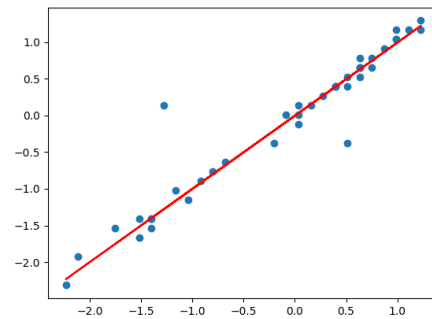
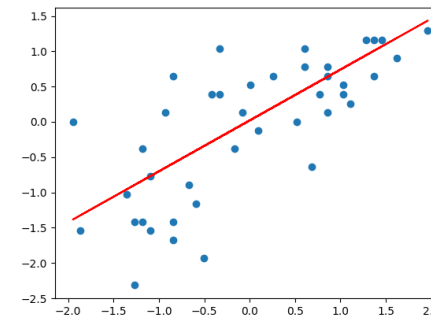
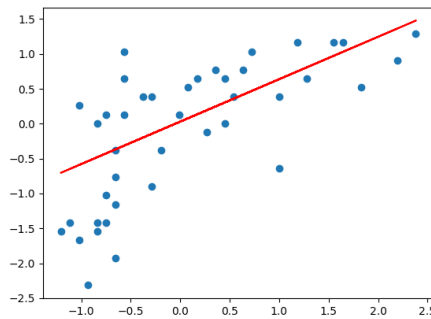
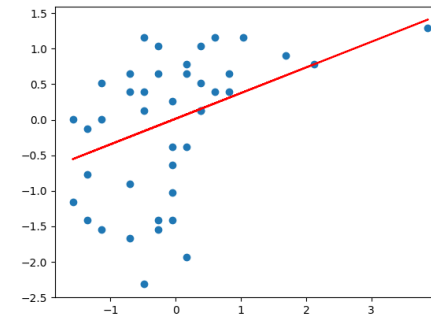
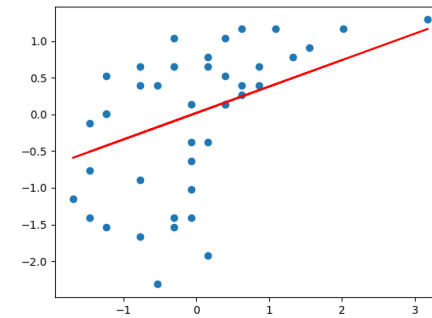
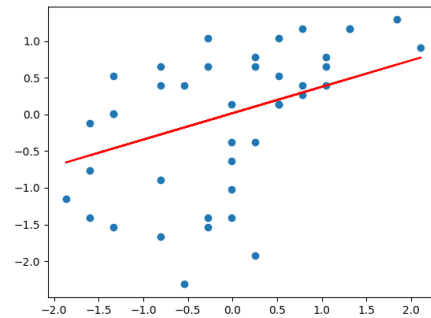
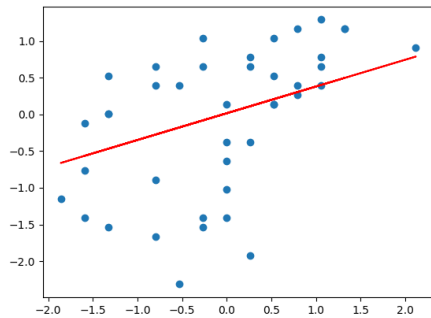
# CORRELACIÓ ENTRE DADES



# REGRESSIÓ SENSE NORMALITZAR



# REGRESSIÓ AMB NORMALITZACIÓ



# ERRORS QUADRÀTICS (MSE)

Atributo 1 Any: 1800 :

MSE: 44.21246510698685 R2 score: -4.881399661218707

Atributo 11 Any: 1810 :

MSE: 43.84808616079501 R2 score: -4.922067014933038

Atributo 31 Any: 1830 :

MSE: 42.38370179335465 R2 score: -2.749826511153811

Atributo 51 Any: 1850 :

MSE: 48.862189561219125 R2 score: -3.065682480954413

Atributo 71 Any: 1870 :

MSE: 44.680822534197446 R2 score: -3.809068722300725

Atributo 91 Any: 1890 :

MSE: 41.91354868870076 R2 score: -1.8771824915583322

Atributo 111 Any: 1910 :

MSE: 39.44282456737262 R2 score: -1.6049298436703499

Atributo 131 Any: 1930 :

MSE: 33.478544124918194 R2 score: -0.5556762414901519

Atributo 151 Any: 1950 :

MSE: 25.946506573853956 R2 score: 0.18085976561084494

Atributo 171 Any: 1970 :

MSE: 17.467762443140433 R2 score: 0.5597816668939357

Atributo 191 Any: 1990 :

MSE: 8.129141058466812 R2 score: 0.8583021403391822

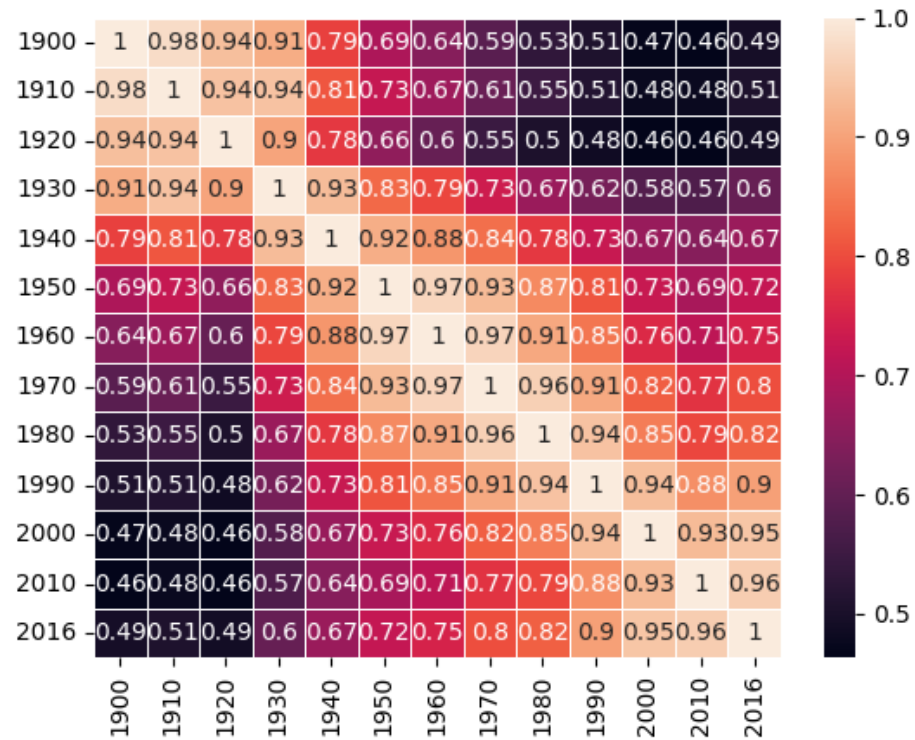
Atributo 201 Any: 2000 :

MSE: 7.062119172191595 R2 score: 0.8811598725572126

Atributo 217 Any: 2016 :

MSE: 3.07848158135029e-29 R2 score: 1.0

# ATRIBUTS ESCOLLITS



Atributo 111 Any: 1910 :

MSE: 39.44282456737262 R2 score: -1.6049298436703499

Atributo 131 Any: 1930 :

MSE: 33.478544124918194 R2 score: -0.5556762414901519

Atributo 151 Any: 1950 :

MSE: 25.946506573853956 R2 score: 0.18085976561084494

Atributo 171 Any: 1970 :

MSE: 17.467762443140433 R2 score: 0.5597816668939357

Atributo 191 Any: 1990 :

MSE: 8.129141058466812 R2 score: 0.8583021403391822

Atributo 201 Any: 2000 :

MSE: 7.062119172191595 R2 score: 0.8811598725572126

Atributo 217 Any: 2016 :

MSE: 3.07848158135029e-29 R2 score: 1.0

# CONCLUSIONS

