FACULDADE DE CIÊNCIAS E TECNOLOGIA
UNIVERSIDADE D COIMBRA

DEI
DEPARTAMENTO ENGENHARIA INFORMÁTICA

Project #2

Assignment #1 – Data Processing with Hadoop MapReduce

16th November 2023

Advanced Infrastructures for Data Science

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Master in Data Science and Engineering (MDSE) Course

Task #1 – Average Number of Friends by Age

Assignment #1

Context: Social Network dataset

Dataset

ID	Name	Age	Friends
0	Will	33	385
1	Jean-Luc	33	2
2	Hugh	55	221
3	Deanna	40	465
4	Quark	68	21

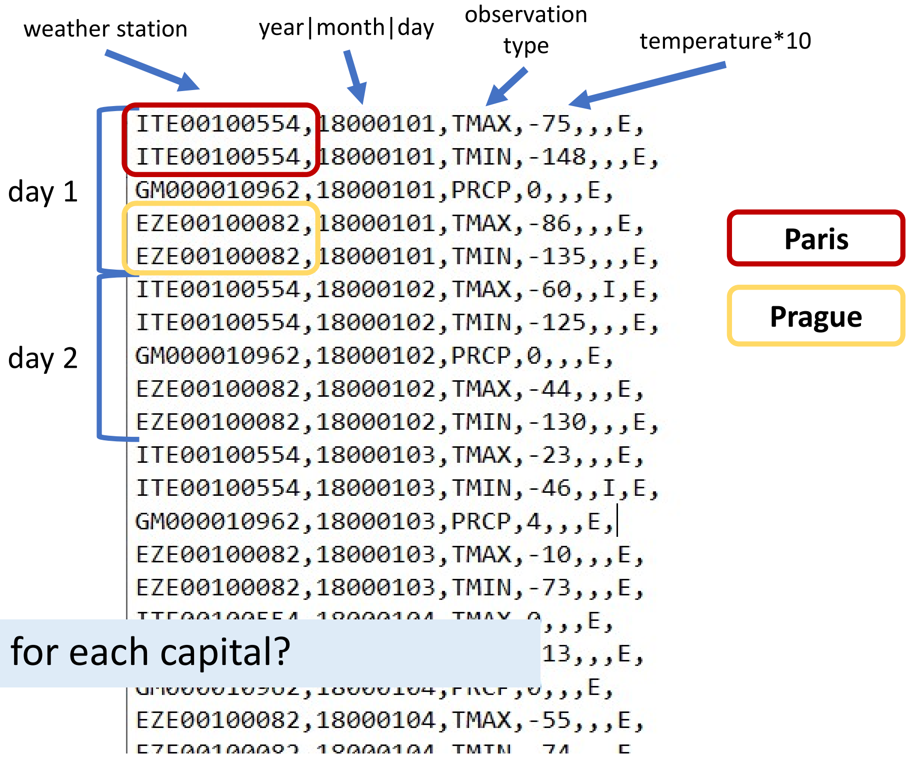
Objective: What is the average number of friends by age?

Task #2 – Minimum Temperature Per Capital

Assignment #1

Context: Daily weather data for year 1800 dataset

Dataset



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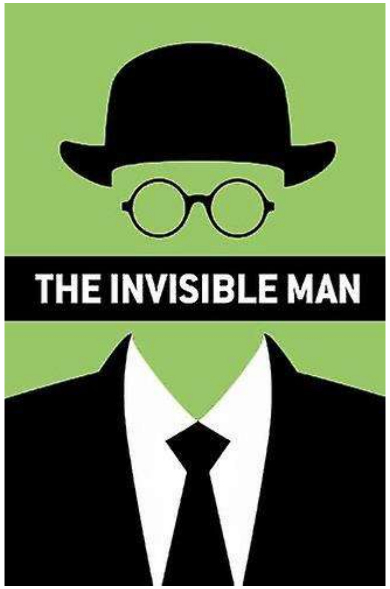
Objective: What is the minimum temperature for each capital?

Task #3 – Sort the Word Frequency in a Book

Assignment #1

Context: Book dataset

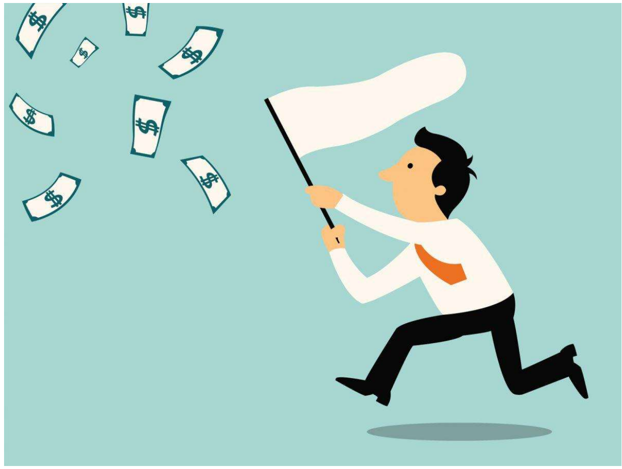


Objective: What is the (sorted) word frequency in the book?

Task #4 – Sort the Total Amount Spent by Customer

Assignment #1

Context: Shopping Store Dataset



Dataset ⇒

Customer_ID	Product_ID	Amount
344	983	45.1
99	574	7.08
344	24	102.2
43	241	37.08
99	230	61.89

Objective: What is the (sorted) total amount spent by each customer?

Good
Work