Departamento de TIC
Computación y Estructuras Discretas III
Seguimiento sobre Transductores

Objetivos

Unidad 1 – Lenguajes Regulares y Autómatas

Definir formalmente los distintos tipos de autómatas finitos (deterministas, no deterministas, no deterministas con transiciones lambda, transductores), dar ejemplos, identificar sus elementos y conocer sus aplicaciones.

Entender y aplicar, tanto las nociones de lenguajes y expresiones regulares, como de autómatas de estado finito, para el reconocimiento de patrones, procesamiento, validación y extracción de texto usando un lenguaje de programación.

Les Nombres

French numbers can be a bit tricky. Just when you think you've got the pattern figured out, the rules suddenly change and you're left thinking, "wait, what?". You have a friend who is about to start his internship at the French Company “Dassault Systèmes” and you’ll design and implement a simple FST on python, using pyformlang to translate the textual representation of numbers between 1 and 99 in French.

Here's an introduction to numbers in French, Also visit this page for a more friendly explanation [link]

Activities

1. [40 pts] Design (by hand and later digitalize) a FST to translate a number between 1 and 99 into its textual representation in French.
2. [40 pts] Implement in pyformlang your FSA according to your design
3. [20 pts] Make sure you Implement at least five simple tests while you are in the process of design-implement your FSA. Then, test exhaustively your FSA with numbers between 1 to 99. Provide the code for each test.