ISIS-1106-1 Lenguajes y MÃ¡quinas
QUIZ Taller 3
Date: October 18, 2023

INDIVIDUAL WORK

1. [100%]

Attached you will find a Gold Project with a file than implements a transducer.
This automaton reads strings of the form:

$$\omega_1\phi\omega_2\phi\ldots\phi\omega_n\$$$

such that:

- $\omega_i \in \{a,\ldots,z\}^+$
- $\phi = ' '$

And writes:

$$\beta_1\rho_1\beta_2\rho_2\ldots\beta_n\rho_n\$$$

Where:

1. The first symbol in β_i is iqual to the first symbol in ω_i
2. For the rest of β_i: '*' replaces symbols that are equal to the first symbol.
3. ρ_i is the number of replacements made modulo 3.

Input: `systems and computing engineering$`

Output: `sy*tem*2and0computing0engin**ring2$`

Input: `going out onto wowwwww hoohoo outdo$`

Output: `goin*1out0ont*1wo*****2hoo*oo1out*1$`

Ejercicio 1.1. *The task for this quiz is to implement a decoder to decode strings coded by the described automaton. You must verify that the coded string is correct as we will test the decoder as a standalone transducer. You must make sure that the first character does not appear in the rest of the string and that the number after each substring corresponds to the number of *'s modulo 3.*
We do include the decoder in the project, but this transdcer just outputs its input.