EIC0022 | THEORY OF COMPUTATION | 2019/2020 - 1st Semester

## Challenge Activity 2 – DFAs

Consider that a software team needs to prove that given two DFAs there are strings commonly recognized by both (i.e., the intersection of the two languages represented by the two DFAs is not an empty language):

- a) Describe a method (1) that the team can use to prove that;
- b) Describe a method (2) to enumerate the N shortest strings accepted by the two DFAs;
- c) Use the methods (1) and (2) considering two DFAs: one recognizing binary numbers multiple of 2 and the other one recognizing binary numbers multiple of 4.