Challenge 5 – Regular Expressions

Describe an algorithm that could be used to eliminate the symbol ∅ from any regular expression[1] that does not correspond to the empty language.

Note that the input and output of the algorithm must be:

- Input: a regular expression representing a non-empty language L
- Output: a regular expression representing the same language L, but without using ∅

[1] Consider regular expressions formed by symbols: ε, ∅, +, ., *, (,), ∑ (any symbol from the alphabet)