

REPORT LN-MP1

Group 24:

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We split the workload in half, therefore the same effort was put into the project by both group members.

Description of our options

To build the metaphoneLN transducer, we decided to use the fstcompose operation, starting with step1 and step2, then the composition of the two composed with step3 and so on.

To build the invertMetaphoneLN transducer, we simply used the fstinvert operation on the metaphoneLN.

Viability of our solution

After testing the metaphoneLN several times with different examples, we can say that our transducer does everything it was required to do. These steps were also tested individually with all given examples to make sure every rule was working.

Usability of the invertMetaphoneLN

Ideally, the invertMetaphoneLN would take the output of the metaphoneLN and give us back its input, but in practice, this does not happen. For example, the last step of our metaphoneLN transducer drops all the vowels in the middle or end of the word, when the invertMetaphoneLN performs that last step, it does not know which vowels were taken and their position within the word, so it doesn't put those vowels back. In addition, it takes every consonant in the word and duplicates it, because the first step of metaphoneLN removes duplicate consonants, except for C.

We tested the invertMetaphoneLN with both our names and confirmed what was described in the previous paragraph, which means that the transducer is functional.

Although the invertMetaphoneLN is correct, it has no usability, because it cannot convert its input back to the input of the metaphoneLN.