

# Music and poetry with spotify - Assignment solution

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## 1 Problem formulation assumptions

An algorithm should be implemented that takes as input a message, and returns a list of Spotify tracks recreating this message. The following requirements should be incorporated: the message should be UTF-8, no case sensitivity, the list of tracks returned should be short and the number of queries should be reduced to improve speed.

In this implementations, a few simplifications were made:

- **Only exact matches were considered.** Any fragment of the message had to match precisely the full name of a track.
- **The message was split by punctuation marks.** To improve semantics, the message was split in sentences that are treated separately.

## 2 Implemented solution

First, the message is split at any occurrence of at any occurrence of {“.”, “;”, “:”, “,”}. Each resulted sentence is processed separately as described below.

## 3 Possible improvements

- Improve the splitting of the poem in sentences
- Inexact matches should be considered A list of the most commonly used abbreviations, as well as typos can be used to provide an answer even when no exact matches are available.
- The list of tracks should match the feeling of the poem