## **Findings on API Rate Limits and Functionality**

## **Rate Limits**

The API imposes different rate limits across its versions:

- Version v1: Allows up to 100 requests per minute.
- Version v2: Allows up to 50 requests per minute.
- Version v3: Allows up to 75 requests per minute.

## Functionality of the API

The API processes queries by returning words that begin with the given query as a prefix. The results are sorted in lexicographical order, but the number of words returned is subject to a predefined limit:

- Version v1: Maximum of 10 words.
- Version v2: Maximum of 12 words.
- Version v3: Maximum of 15 words.

If the number of matching words exceeds the limit, the API returns only up to the maximum allowed. Conversely, if fewer words are returned than the limit, it indicates that no additional words match the given prefix.

## **Differences Between API Versions**

Each API version supports different character sets:

- Version v1: Returns words containing only alphabetic characters (A-Z, a-z).
- Version v2: Expands support to include both alphabets and numbers (0-9).
- Version v3: Further extends support to include alphabets, numbers, and four special characters (space " ", plus "+", minus "-", and period ".").