

# Experiment 04 - Exercise 06: Unique Words Using Sets

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## Objective

Count the number of unique words in a sentence using sets.

## Input

A sentence.

## Output

Unique word count (and optionally the set of unique words).

## Approach

- Split sentence into words.
- Normalize words (lowercase, remove punctuation if needed).
- Insert into a set to remove duplicates automatically.

## Time Complexity

$\Theta(n)$  average-case, where  $n$  is the number of words/characters.