

Prolog problem - EARIN lab 7

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Short Report

Variant 4: Convert an input English word to number N . $N \in [0, 1000]$

- **How it works:**

1. Preprocess the input string into lowercase word atoms.
2. Parse the words with grammar rules for “thousand,” “hundreds,” optional “and,” tens, and units.
3. Compute the numeric value by summing each part using arithmetic goals.

- **Key parts:**

- Grammar rules (--> notation): define the structure for thousands, hundreds, tens, and units.
- Fact tables: map words like `five` or `forty` to their numeric values.

- **Challenges:** Allowing the optional “and” and empty components (no hundreds or no units) without breaking the parsing logic. Also overcoming conflicts with numbers like seventeen, since it doesn’t directly represent a digit.