**Number to Words Converter**

**Project Description**

This project is a Python-based application that converts numeric inputs into their word equivalents and provides audio output of the result. The tool is interactive and user-friendly, showcasing programming logic and text-to-speech capabilities. It’s designed to handle user inputs robustly and provide meaningful feedback.

**Tools/Technologies: Python, num2words library, pyttsx3 (text-to-speech library)**

**Project Goals or Objectives**

The primary objectives were:

1. Convert numerical inputs into words (e.g., 123 → "one hundred twenty-three").
2. Implement a text-to-speech feature to read the words aloud.
3. Create an interactive program that validates user inputs and handles errors effectively.

**What I Learned or Achieved**

* Gained experience in integrating libraries like num2words for text conversion and pyttsx3 for speech synthesis.
* Enhanced understanding of Python functions, input validation, and error handling.
* Improved skills in creating interactive console-based applications.
* Developed a deeper appreciation for designing user-friendly software.

**Detailed Steps or Methodology**

1. **Input Handling**:
   * Designed a loop to accept and validate user inputs (only integers are allowed).
   * Provided user-friendly messages for invalid inputs.
2. **Number Conversion**:
   * Used the num2words library to convert numeric inputs into their word equivalents.
3. **Text-to-Speech Integration**:
   * Integrated the pyttsx3 library to vocalize the converted words.
   * Customized speech properties like rate, volume, and voice.
4. **User Interaction**:
   * Allowed users to repeat the process or exit gracefully based on their input.
   * Ensured the program remains robust by handling edge cases and exceptions.