

COM1001 LAB 4 Q1

Your task is to read a sentence from the user and print it back so that **each word is reversed**, but the **word order stays the same**.

For example:

- Input: "hello world"
- Output: "olleh dlrow"

The program should:

1. Read a sentence from the user.
2. Go through the sentence **character by character**.
3. Detect word boundaries (spaces) manually.
4. Reverse each word using loops and string concatenation.
5. Print the final reversed sentence.

Rules

You **must not** use:

`.split()`, `.join()`, or `.reverse()`

String slicing (`[::-1]`)

- You **must**:

Use at least one for loop.

Use string concatenation to build reversed words.

Define and use a function (e.g., `def reverse_words(sentence):`).

Hints

- Use a variable (e.g., `word`) to collect characters of the current word.
- When you reach a space (`' '`), it means one word has ended.
- Reverse the collected word using another for loop before moving on.
- Don't forget to process the **last word** (there's no space after it!).

Example1:

Input: hello world
Output: nohtyp bal

Example2:

Input: python lab
Output: olleh dlrow