

Part B

Mini Project

Note: You are required to show the output of this exercise to one of the TA at the start of the next lab session (13th Nov). This is not graded but we must log that you have completed this exercise.

Write a C program that reads an integer amount (between 1 – 1000000) from the user and converts it into its textual representation in words.

For example,

- If the user enters "11, the program should output "eleven".
- If the user enters "199", the program should output "one hundred ninety nine".
- If the user enters "1234", the program should output "one thousand two hundred thirty four".
- If the user enters "53245, the program should output "fifty three thousand two hundred forty five".
- If the user enters " 1005010, the program should output "one million five thousand ten".

Have a look at this number to word calculator to see what the output should be of your C program:

<https://www.calculatorsoup.com/calculators/conversions/numberstowords.php>

Requirements:

- Use control flow statements (if-else, switch, loops) where necessary.
- Implement the conversion logic in one or more functions (as necessary).
- You can use arrays and strings to store and manipulate the textual representation of numbers (if needed)
- **Use of pointers is not allowed for this exercise!**

Hints:

- Break down the integer into groups of three digits (ones, thousands, millions, etc.) and convert each group to words separately.
- Use arrays or switch statements to map digit values to their textual representations.
- Handle special cases for numbers less than 20 (e.g., "eleven," "twelve") and multiples of 10 (e.g., "twenty," "thirty").
- Combine the textual representations of the individual groups to form the complete text.