### Hexadecimal-Decimal Calculator

This program allows the user to convert numbers between decimal and hexadecimal bases.

It is implemented in Python.

# How to Use:

Run the program in your Python environment

### Choose an option:

Enter 1 to convert decimal to hexadecimal

Enter 2 to convert hexadecimal to decimal

Enter 3 to exit

If you chose option 1, enter a decimal number when asked.

The program will convert it to hexadecimal and display the result.

If you chose option 2, enter a hexadecimal number when asked.

The program will convert it to decimal and display the result.

To exit the program, choose option 3.

# Input Validation

The program performs input validation to ensure that the user enters a valid decimal or hexadecimal number.

If the user enters an invalid number, the program will asked them to enter a valid number.

#### <u>Implementation Details</u>

The program uses two functions to perform the conversions between decimal and hexadecimal bases:

dec\_to\_hex: Converts a decimal number to a hexadecimal number

hex\_to\_dec: Converts a hexadecimal number to a decimal number

The main function uses a loop to allow the user to make multiple conversions until they choose to exit the program.

Within the loop, the program asked the user for input, performs input validation, and calls the appropriate conversion function based on the user's choice.

The program displays the result of the conversion and asked the user to press Enter to continue.

THANK YOU

GROUP 15.