

Write a program that accepts 3 inputs, `inp`, `base_inp`, and `base_out`. `inp` is a number in base `base_inp`. Convert `inp` to base `base_out` and print the result. Your program must be case insensitive (i.e. 'A' and 'a' must be recognized as having the same value 10) .

Input:

`inp` is a string of characters which do not exceed 7 digits regardless of its base.

$2 \leq \text{base_inp}, \text{base_out} \leq 36$.

A = 10, B = 11, ... Y = 34, Z = 35

Output:

`inp` in base `base_out` . If one of the inputs is invalid, print an error message.

Example: (first line is the input, second line is the output)

AaA 16 2

101010101010

12 10 20

C

01120 2 32

Invalid input

011001 2 10

25

You cannot use any library besides `stdio.h`. You cannot use any kind of loop (i.e. all repeating instructions must be recursive). Work independently. Collaboration with other students is punishable with a grade of 5.0 and a case with the SDT. Your programs will be tested against MOSS. Highly similar programs will be investigated for possible academic dishonesty.

Grading system

85% - correctness and functionality

10% - coding (code elegance, efficiency, readability and modularity)

5% - documentation (comments)

Submit via email at mr.nacu@gmail.com with subject CS11<section>MP1 (e.g. CS11THCWMP1). Take note: subject header has no space between words. Submit in single source code with filename Lastname_Firstname_MP1.c (e.g. DelaCruz_Juan_MP1.c). Incorrect subject header and source code filename will not be accepted.

Submission deadline: August 13 (Sat) 5PM

Defence date: August 20 (Sat)