

Hexadecimal Arithmetic Program Report

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First report file of Hex Addition: At first, I use a normal addition formula to add 2 numbers, but then I realize it can't detect overflow, since we don't have a carry out to detect when the overflow occurs, so I use large number operation, to count sum and carry digit by digit, the most difficult part is to print the correct length of matrix sum, to print the correct length of it, I use variable flag to count the actual length of sum and print the correct number of char, it is easy to do but hard to think at the first place, I've tried multiple method and debugs and only made it worse, I think of this method after about 1,2 hours discussion with my friend.

Second report file of Hex Multiplication: This is easier than the first one, since the Multiplication didn't require to check if overflow occurs, so I just use the normal multiplication. But since I didn't use Adder in this program to calculate the length of product like I do in the first file so I use a while loop to divide product by 16 again and again until the result is 0, every time I divide the product, I made the length+1, so the final output of length will be the length of product. That I can correctly print the space and '-' in the formula.