

COMP 2510 Quiz 3

This is a closed book quiz. Write a multiplier that can multiply up to 64 bits of inputs. Your inputs are hexadecimal numbers and the output is also hexadecimal. You must do the multiplication in multiplyNums function and this function cannot have any * or /. Also, you are not allowed to use any variant of uint128 or higher bitwidth variant like uint128. You can assume both inputs to be unsigned numbers. Your output is not supposed to have any leading zeros. No corner case testing.

How to run the program:

```
./<executable> 123456789ABCDEF0 123456789ABCDEF0  
1AD0326C296B4F787D791F33DC40000
```

Make sure to include the following in your main function.

```
char *ANum = "A0000";  
  
FILE *outputFile = fopen(ANum, "w");  
  
if (outputFile == NULL) {  
    printf("Failed to create the output file.\n");  
    return 1;  
}  
  
fclose(outputFile);
```