

CS0007: Programming Challenges!

Names: _____

Problem 1: ABCD Problem

ABCD represents a 4-digit number whose digits are A, B, C and D, respectively. And DCBA represents another number with the same digits, but in reverse order. You are told that: $A > 0$, and $4 * ABCD = DCBA$. Write program that finds and displays the number represented by ABCD.

My implementation: 21 Lines

Answer: _____

Problem 2: Caesar Cypher

Write a program that accepts a message on the keyboard (using lower case alphabetic characters only). Your program should then display that same message in lower case letters, but with each letter in the message replaced with the letter that is three places further back in the alphabet. (I.e., "d" becomes "a", "c" becomes "z", "b" becomes "y", etc.). When finished, have your instructor test your program and get his signature of approval.

My implementation: 28 Lines

Signature: _____

Problem 3: FizzBuzz

Write a program that prints the numbers from 1 to 100, but for multiples of three print "Fizz" instead of the number, for the multiples of five print "Buzz", and for numbers which are multiples of both three and five print "FizzBuzz". When finished, have your instructor test your program and get his signature of approval.

My implementation: 14 Lines

Signature: _____

Problem 4: String Reverse

Write a program that takes in input in from the keyboard, and prints the input in reverse. To reverse the input, you can **ONLY** use the `toCharArray()` method. All other methods cannot be used to reverse the input. Also, you can only use one character array. When finished, have your instructor test your program and get his signature of approval.

My implementation: 28 Lines

Signature: _____

Problem 5: Prime Number Sum

Write a program that sums all of the prime numbers from 2 to 5000 and displays the result to the screen.

My implementation: 15 Lines

Answer: _____