



Homework 2 – Model 4

Problem1

A Fibonacci sequence is composed of elements created by adding the two previous elements. The simplest Fibonacci sequence starts with 1, 1 and proceeds as follows: 1, 1, 2, 3, 5, 8, 13,

However, a Fibonacci sequence can be created with any two starting numbers. Fibonacci sequences appear regularly in nature. Prompt the user to enter the first two numbers in a Fibonacci sequence and the total number of elements requested for the sequence. Find the sequence and store it in an array.

Example

Enter the first element in the Fibonacci sequence: 1

Enter the second element in the Fibonacci sequence: 1

Enter the total number of elements: 12

The sequence: 1 1 2 3 5 8 13 21 34 55 89 144

Problem2

Write a function echoletters that will prompt the user for letters of the alphabet and echo print them until the user enters a character that is not a letter of the alphabet. At that point, the function will print the non-letter and a count of how many letters were entered.

Example input - output

Enter a letter: T

Thanks, you entered a T

Enter a letter: a

Thanks, you entered a a

Enter a letter: 8

8 is not a letter

You entered 2 letters

Another Example

Enter a letter: !

! is not a letter

You did not enter any letters!

Problem3

Write a function that takes an array as input and return another array with the same size as output. Your function should replace each element with the sum of all elements of the original array from the left end to its location.

The input output of the program should look like

Enter the array: [1 2 3 4 5]

The sub total array: 1 3 6 10 15
