DESIGN PRAC4

reverseDigit: there are static integer variables , one is temp ,another is sum, the base case is if the value less than 0 ,then return the input. If great than o, then using recursion way to do it.

reverseString: first program defines the length of string ,if the length is less or equal 1, it just return previous value. If the length is great than 1, doing recursion function .

Fibonacci::calculate: this function calculate the value of Fibonacci ,the algorithm is F(N)=F(N-1)+F(N-2);

Fibonacci::calcula: this function using more efficient way to storing value to prevent calculated value to be calculated again. As a result I set the int array that the length is 9999,I assume the size is large enough .then storing value

Main:

Test: at first I set test function which means to validate the input , if the input value is belonging ascci alpha number, if it is not alpha, return false .

Implement:

I use substr() the function to separate the input to be small one, separate by ”space “ . the I use string.find() to get the location of space in order to separate .

Then I use “test” function to differ the input , if the input is not in the ascci number interval . I print ERROR.

At final I call each functions ,then combinate all function together to make the excellent assignment without bug!

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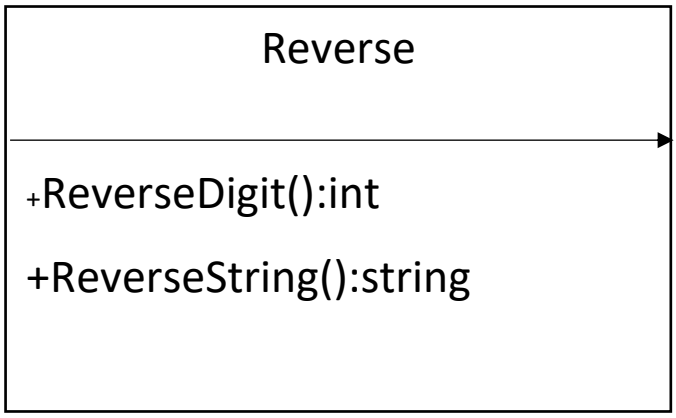

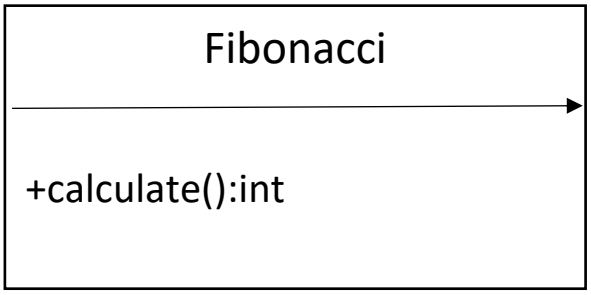

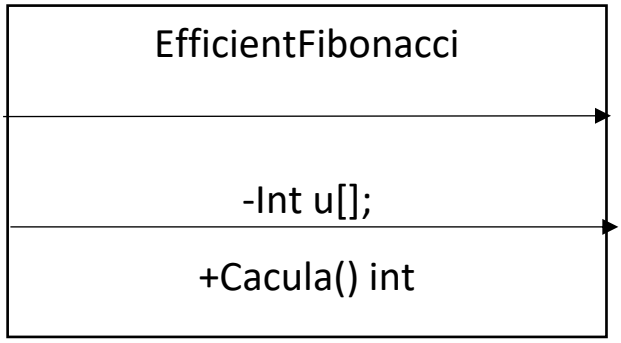

Test case

Input :0 0 0 0

Output:0 0 0 0

Input:1 qerw 3 6

Output:1 wreq 2 8

Input:1234 oop 6 7

Output:4321 poo 8 13