

Cade Nichols - Homework 3 - Due: October 2nd, 2022 - CSCI 2525 H01

Reorder.asm

Rearrange values of an array into ascending order

Pseudocode:

Declare array variable to house the 3 given numbers

Declare variable to get size of array

Clear registers

Load array into eax

Use xchg function to switch the given numbers in memory to the register

Store list size variable into a register

Display array in correct order

Fibonacci.asm

Compute and display the fibonacci sequence in memory out to iteration 9

Display iterations 5 - 9 into a register

Pseudocode:

Declare first 2 interactions of fibonacci sequence

Create empty array of 9 elements

Clear registers

Set counter variable to 9

Move first iterations into al register

Move second into dl register

Save first iteration into array manually

Create loop

Add the 2 existing numbers in al and dl together

Save new number into next bit of array

Save previous number in array into al

Save current number into dl

Repeat loop until counter is met

Zero ebx register

Move a pointer pointing to 5th iteration of array into ebx

Call dumpregs to show 5 - 9 has appeared in ebx register

Eat cake