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COSC 300-001

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Decrement by Dividing Floats

**Code:**

# Author: Drew Daniel

# COSC 300-001

# Start wiht user input

# decrement by dividing by 3

# iterate until value is less than 10

.data

start: .asciiz "Enter starting number: "

final: .asciiz "\nThe final number is: "

count: .asciiz "\nNumber of iterations: "

bye: .asciiz "\n\nHave a nice day!"

.text

.globl main

main:

#System prompts user to enter number

la $a0, start

li $v0, 4

syscall

#laod user's float

li $v0, 6

syscall

#move foat to $f12 for easier manipulation

mov.s $f12, $f0

# Initialize decrementer, goal, and counter

li.s $f0, 3.0

li.s $f2, 10.0

li $t0, 0

# Begin loop to decrement

Loop:

addi $t0, $t0, 1

div.s $f12, $f12, $f0

c.le.s $f2, $f12

bc1t Loop

la $a0, final

li $v0, 4

syscall

li $v0, 2

syscall

la $a0, count

li $v0, 4

syscall

move $a0, $t0

li $v0, 1

syscall

la $a0, bye

li $v0, 4

syscall

li $v0, 10

syscall

**Console:**

