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1: #Sawyer Fenwick 6005011
2: #COSC 2P12 Assign_3
3: #PART A
4: #This code asks the user for input and returns the number they inputed (n) and prints
n stars.
5: #If the number entered is negative it asks the user to input a different number.
6:
7: .data
8: msg:      .asciiz "Please Enter A Non-negative Value: "
9: err:      .asciiz "Error: Value Is Negative. Please Try Again."
10: star:     .asciiz "*"
11:          .text
12: main:
13:     li $t2, 0    #temporary variable for "loop" (line 32)
14:
15:     la $a0, msg  #loads a0 with msg
16:     li $v0, 4    #syscall print_str (asking user for input)
17:     syscall
18:
19:     li $v0, 5    #syscall read_int (recieving user input)
20:     syscall
21:
22:     blt $v0, $t2, error #if integer read is negative goto error
23:
24:     la $a0, ($v0)  #loading a0 with contents of v0 (user input)
25:     la $t1, ($v0)  #loading t1 with contents of v0 to use in for loop later
26:     li $v0, 1     #syscall print_int (printing input)
27:     syscall
28:
29:     li $a0, 10    #loading a0 with newline char
30:     li $v0, 11    #syscall print_char
31:     syscall
32: loop:
33:     beq $t1, $t2, exit #when t2 == t1 break
34:     addi $t2, $t2, 1  #increment counter
35:
36:     la $a0, star    #load a0 with star
37:     li $v0, 4       #syscall print_str
38:     syscall
39:
40:     j loop          #repeat (goto line 32)
41: error:
42:     la $a0, err     #load a0 with contents of err
43:     li $v0, 4       #syscall print_str
44:     syscall
45:
46:     li $a0, 10      #load a0 with newline char
47:     li $v0, 11      #syscall print_char
48:     syscall
49:
50:     j main          #return to main method
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51: exit:
52:     li $v0, 10      #syscall exit
53:     syscall
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