

Lecture 14 Program 3

```
# Lecture 14 Exercise 2
# Reversing the order of a string
# of numbers using the stack and
# two simple loops.
```

```
.text
main:  li $t2, 4
       la $t1, num1
loop:  lw $t0, 0($t1)
       sub $sp, $sp, 4
       sw $t0, 0($sp)
       sub $t2, $t2, 1
       beqz $t2, print
       addi $t1, $t1, 4
       j loop

print: li $t2, 4
next:  lw $a0, 0($sp)
       addi $sp, $sp, 4
       li $v0, 1
       syscall
       li $v0, 11
       li $a0, 0x0a
       syscall
       sub $t2, $t2, 1
       beqz $t2, done
       j next

done:  li $v0, 10
       syscall

num1:  .word 34527
num2:  .word 98564
num3:  .word 12953
num4:  .word 68577
```