

```

#ask user to enter an input
#and determine if its a leap year or not
.data
prompt: .ascii "Please enter a year: "
result1: .ascii "leap year"
result2: .ascii "Not a leap year"

.text

    li $v0, 4
    la $a0, prompt
    syscall

    li $v0, 5
    syscall
    move $t0, $v0      #$t0 = input number

    li $s1, 400
    div $t0, $s1
    mfhi $t2           #$t2 = t0%t1

    beqz $t2, leap

    li $s2, 100
    div $t0, $s2
    mfhi $t2

    beqz $t2, notLeap

    li $s3, 4
    div $t0, $s3
    mfhi $t2

    beqz $t2, leap

b notLeap
leap:
    li $v0, 4
    la $a0, result1
    syscall
    b exit
notLeap:

    li $v0, 4
    la $a0, result2
    syscall

exit:
    li $v0, 10
    syscall

```