```
rile cuit rotttlat view neip
.data
                                                      .data
                .asciiz"Enter the number: "
        msg1:
                                                                        .asciiz"Enter the number: "
                                                               msg1:
                .asciiz"The sum of integers upto "
        msg2:
                                                                        .asciiz"Factorial of "
                                                               msg2:
        msg3:
                .asciiz" is "
                                                                        .asciiz" is "
                                                               msg3:
.text
                                                      .text
.globl main
                                                      .globl main
.ent main
                                                      .ent main
main:
                                                      main:
                                                               li $v0,4
        li $v0,4
                                                               la $a0,msg1
        la $a0,msg1
                                                               syscall
        syscall
                                                               li $v0,5
        li $v0,5
                                                               syscall
        syscall
                                                               move $t5,$v0
        move $t5,$v0
                                                               addi $t0,$t5,1
        addi $t0,$t5,1
                                                               addi $t1,$0,1
        addi $t1,$0,0
                                                               addi $t2,$0,1
        add $t2,$0,$0
                                                      loop:
                                                               slt $t3,$t1,$t0
        slt $t3,$t1,$t0
loop:
                                                               beq $t3,$0,exit
        beq $t3,$0,exit
                                                               mult $t1,$t2
        add $t2,$t2,$t1
                                                               mflo $t2
        addi $t1,$t1,1
                                                               addi $t1,$t1,1
        j loop
                                                               j loop
exit:
                                                      exit:
        li $v0,4
                                                               li $v0,4
        la $a0,msg2
                                                               la $a0,msg2
                                                               syscall
        syscall
                                                               li $v0,1
        li $v0,1
                                                               move $a0,$t5
        move $a0,$t5
                                                               syscall
        syscall
                                                               li $v0,4
        li $v0,4
                                                               la $a0,msg3
        la $a0,msg3
                                                               syscall
        syscall
                                                               li $v0,1
        li $v0,1
                                                               move $a0,$t2
        move $a0,$t2
                                                               syscall
        syscall
                                                               jr $ra
        jr $ra
                                                      .end main
.end main
```



Enter the number: 5

The sum of integers upto 5 is 15



Enter the number: 5 Factorial of 5 is 120

```
.data
       msg1: .asciiz"Enter the number: "
              .asciiz"Number is prime "
        msg2:
        msg3:
                .asciiz"Number is composite "
.text
.globl main
.ent main
main:
        li $v0,4
        la $a0,msg1
        syscall
        li $v0,5
        syscall
       move $t0,$v0
        addi $t1,$0,2
loop:
        slt $t2,$t1,$t0
       beq $t2,$0,prime
        div $t0,$t1
        mfhi $t3
        beq $t3,$0,composite
        addi $t1,$t1,1
        j loop
composite:
        li $v0,4
        la $a0,msg3
        syscall
        j end
prime:
        li $v0,4
        la $a0,msg2
        syscall
end:
        jr $ra
.end main
```



Enter the number: 27 Number is composite



Enter the number: 13 Number is prime