```
        .file   1 "test_asm.c"
        .section .mdebug.abi32
        .previous
        .gnu_attribute 4, 1
        .globl  tab
        .data
        .align  2
        .type   tab, @object
        .size   tab, 28
tab:
        .word   23, 3
        .word   45
        .word   -6
        .word   120
        .word   2
        .word   11
        .word   23
        .text
        .align  2
        .globl  max2
        .set    nomips16
        .ent    max2
max2:
        .frame  $fp,16,$31              # vars= 8, regs= 1/0, args= 0, gp= 0
        .mask   0x40000000,-4
        .fmask  0x00000000,0
        .set    noreorder
        .set    nomacro

        addiu   $sp,$sp,-16
        sw      $fp,12($sp)
        move    $fp,$sp
        sw      $4,16($fp)
        sw      $5,20($fp)
        lw      $2,16($fp)
        lw      $3,20($fp)
        slt     $2,$2,$3
        beq     $2,$0,$L2
        nop

        lw      $2,20($fp)
        sw      $2,0($fp)
        j       $L3
        nop

$L2:
        lw      $2,16($fp)
        sw      $2,0($fp)
$L3:
        lw      $2,0($fp)
        move    $sp,$fp
        lw      $fp,12($sp)
        addiu   $sp,$sp,16
        j       $31
        nop

        .set    macro
        .set    reorder
        .end    max2
        .size   max2, .-max2
        .align  2
        .globl  max
        .set    nomips16
        .ent    max
max:
        .frame  $fp,16,$31              # vars= 8, regs= 1/0, args= 0, gp= 0
        .mask   0x40000000,-4
        .fmask  0x00000000,0
        .set    noreorder
```

```
        .set    nomacro

        addiu   $sp,$sp,-16
        sw      $fp,12($sp)
        move    $fp,$sp
        sw      $4,16($fp)
        sw      $5,20($fp)
        sw      $6,24($fp)
        lw      $2,16($fp)
        lw      $3,20($fp)
        slt     $2,$2,$3
        beq     $2,$0,$L6
        nop

        lw      $2,20($fp)
        lw      $3,24($fp)
        slt     $2,$2,$3
        beq     $2,$0,$L7
        nop

        lw      $2,24($fp)
        sw      $2,0($fp)
        j       $L8
        nop

$L7:
        lw      $2,20($fp)
        sw      $2,0($fp)
        j       $L8
        nop

$L6:
        lw      $2,16($fp)
        lw      $3,24($fp)
        slt     $2,$2,$3
        beq     $2,$0,$L9
        nop

        lw      $2,24($fp)
        sw      $2,0($fp)
        j       $L8
        nop

$L9:
        lw      $2,16($fp)
        sw      $2,0($fp)
$L8:
        lw      $2,0($fp)
        move    $sp,$fp
        lw      $fp,12($sp)
        addiu   $sp,$sp,16
        j       $31
        nop

        .set    macro
        .set    reorder
        .end    max
        .size   max, .-max
        .align  2
        .globl  max_tab
        .set    nomips16
        .ent    max_tab
max_tab:
        .frame  $fp,16,$31              # vars= 8, regs= 1/0, args= 0, gp= 0
        .mask   0x40000000,-4
        .fmask  0x00000000,0
        .set    noreorder
        .set    nomacro
```

```
        addiu   $sp,$sp,-16
        sw      $fp,12($sp)
        move    $fp,$sp
        sw      $4,16($fp)
        sw      $5,20($fp)
        li      $2,-1                   # 0xffffffffffffffff
        sw      $2,0($fp)
        sw      $0,4($fp)
        j       $L12
        nop

$L14:
        lw      $2,4($fp)
        sll     $3,$2,2
        lw      $2,16($fp)
        addu    $2,$2,$3
        lw      $3,0($2)
        lw      $2,0($fp)
        slt     $2,$2,$3
        beq     $2,$0,$L13
        nop

        lw      $2,4($fp)
        sll     $3,$2,2
        lw      $2,16($fp)
        addu    $2,$2,$3
        lw      $2,0($2)
        sw      $2,0($fp)
$L13:
        lw      $2,4($fp)
        addiu   $2,$2,1
        sw      $2,4($fp)
$L12:
        lw      $2,4($fp)
        lw      $3,20($fp)
        slt     $2,$2,$3
        bne     $2,$0,$L14
        nop

        lw      $2,0($fp)
        move    $sp,$fp
        lw      $fp,12($sp)
        addiu   $sp,$sp,16
        j       $31
        nop

        .set    macro
        .set    reorder
        .end    max_tab
        .size   max_tab, .-max_tab
        .rdata
        .align  2
$LC0:
        .ascii  "%d\012\000"
        .text
        .align  2
        .globl  main
        .set    nomips16
        .ent    main
main:
        .frame  $fp,24,$31              # vars= 0, regs= 2/0, args= 16, gp= 0
        .mask   0xc0000000,-4
        .fmask  0x00000000,0
        .set    noreorder
        .set    nomacro

        addiu   $sp,$sp,-24
        sw      $31,20($sp)
        sw      $fp,16($sp)
```

```
        move    $fp,$sp
        sw      $4,24($fp)
        sw      $5,28($fp)
        li      $4,3                    # 0x3
        li      $5,16                   # 0x10
        li      $6,8                    # 0x8
        jal     max
        nop

        move    $3,$2
        lui     $2,%hi($LC0)
        addiu   $4,$2,%lo($LC0)
        move    $5,$3
        jal     printf
        nop

        lui     $2,%hi(tab)
        addiu   $4,$2,%lo(tab)
        li      $5,7                    # 0x7
        jal     max_tab
        nop

        move    $3,$2
        lui     $2,%hi($LC0)
        addiu   $4,$2,%lo($LC0)
        move    $5,$3
        jal     printf
        nop

        move    $2,$0
        move    $sp,$fp
        lw      $31,20($sp)
        lw      $fp,16($sp)
        addiu   $sp,$sp,24
        j       $31
        nop

        .set    macro
        .set    reorder
        .end    main
        .size   main, .-main
        .ident  "GCC: (GNU) 4.3.2"
```