

```

int    i=0;                                addu  $2,$3,$4
int    j=1;                                lw    $3,0($2)
int    k=2;                                j    $3
int    h=3;

int    function()
{
    switch(i)
    {
        case 3:   j=k+h;      break;
        case 4:   j=k-h;      break;
        case 5:   j=k&h;      break;
        case 6:   j=k|h;      break;
        case 7:   j=k^h;      break;
        case 8:   j=k-2*h;    break;
        case 9:   j=k+2*h;    break;
    }
}

.sdata
.globl i
.globl j
.globl k
.globl h

.align 2
i: .word 0
j: .word 1
k: .word 2
h: .word 3

.rdata
.align 3
$L10:
.word $L3
.word $L4
.word $L5
.word $L6
.word $L7
.word $L8
.word $L9

.text
.align 2
.globl foo

function: subu $sp,$sp,8
          sw  $fp,0($sp)
          move $fp,$sp
          lw   $3,i
          subu $2,$3,3
          sltu $3,$2,7
          beq $3,$0,$L11
          sll $3,$2,2
          la   $4,$L10

$L3:                                lw   $2,k
                                      lw   $3,h
                                      addu $2,$2,$3
                                      sw   $2,j
                                      j    $L2

$L4:                                lw   $2,k
                                      lw   $3,h
                                      subu $2,$2,$3
                                      sw   $2,j
                                      j    $L2

$L5:                                lw   $2,k
                                      lw   $3,h
                                      and  $2,$2,$3
                                      sw   $2,j
                                      j    $L2

$L6:                                lw   $2,k
                                      lw   $3,h
                                      or   $2,$2,$3
                                      sw   $2,j
                                      j    $L2

$L7:                                lw   $2,k
                                      lw   $3,h
                                      xor  $2,$2,$3
                                      sw   $2,j
                                      j    $L2

$L8:                                lw   $2,h
                                      move $3,$2
                                      sll  $2,$3,1
                                      lw   $3,k
                                      subu $2,$3,$2
                                      sw   $2,j
                                      j    $L2

$L9:                                lw   $2,h
                                      move $3,$2
                                      sll  $2,$3,1
                                      lw   $3,k
                                      addu $2,$3,$2
                                      sw   $2,j
                                      j    $L2

$L11:
$L2:
$L1:
move $sp,$fp
lw   $fp,0($sp)
addu $sp,$sp,8
j   $31

```