

gcd:

| | | |
|-----|------------|-------------------------------|
| cmp | r0, r1 | <i># compare r0 and r1</i> |
| beq | end | <i># branch if r0 == r1</i> |
| blt | less | <i># branch if r0 < r1</i> |
| sub | r0, r0, r1 | <i># r0 = r0 - r1</i> |
| b | gcd | <i># branch to label gcd</i> |

less:

| | | |
|-----|------------|------------------------------|
| sub | r1, r1, r0 | <i># r1 = r1 - r0</i> |
| b | gcd | <i># branch to label gcd</i> |

end:

| | | |
|-----|------------|-----------------------|
| add | r1, r1, r0 | <i># r1 = r1 + r0</i> |
| mov | r3, r1 | <i># r3 = r1</i> |