

```
1 main:
2     addi    t1, zero, 0xff        # load t1 with 255
3     addi    a0, zero, 0x0         # a0 is used for output
4 mloop:
5     addi    a1, zero, 0x0         # a1 is the counter, init to 0
6 iloop:
7     addi    a0, a1, 0             # load a0 with a1
8     addi    a1, a1, 1             # increment a1
9     bne     a1, t1, iloop         # if a1 = 255, branch to iloop
10    bne     t1, zero, mloop        # else always branch to mloop
```