

[cmp, bne, add](#)

== [apollo_asm](#) ==

This code will make a loop to count from 0 to 100.
final result can be checked in a shell with: `echo $rc`

```
# loop counter
# credits to pisklak for the code
    move.w  #0,d0    ; set register d0 with value zero
loop1  add   #1,d0    ; add 1 to register d0
    cmp.w   #100,d0  ; compare if register d0 equals 100
    bne    loop1    ; if not equal then branch back to 'loop1' label
    rts                    ; exit loop
```

We compare (cmp) register D0 and value 100. Then next instruction is 'bne' which means 'branch not equal'. This instruction 'bne' says: if the result of the cmp is 'not equality' then go to label 'loop1'. This makes us loop until D0 equals 100.

From:

<https://apollo-accelerators.com/wiki/> - **Apollo Accelerators Public Wiki**

Permanent link:

https://apollo-accelerators.com/wiki/doku.php/loop_based_counter

Last update: **2016/08/31 11:31**

