```
Main Core (Assembly)
                                            Null Filtering
1: call malloc ;return
                             1: rf null[1] = false
pointer 0x12340000 in r1
                             2: rf_null[2] = true
2: mov r2, #8
  ; r2 is not a pointer
                             3: rf null[3] = true
3a: mov r3, #1
3b: str r3, [r1, #12]
                             3b: if (rf_null[1] && rf_null[3]) {
    ; store to 0x1234000c
                                   // filter monitoring
                                 mem null[r3 + 12] = rf null[r3]
4: add r2, r2, r3
                            4: if (rf_null[2] && rf_null[3]) {
                                  // filter monitoring
                                rf null[r3] = rf null[3] & rf null[2]
```