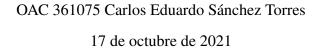


## 3.8 Código máquina a Ensamblador





```
# $t1=a, $t0=b, $s0=c, $t3=d, $s3=e

2 000 sub $t1,$t0,$s0 # a=b-c

3 032 bne $t0,$s0,EXIT # b!=c => EXIT

4 064 WHILE: bgtz $s0, EXIT # c>0 => EXIT

5 096 add $t3,$t3,$s0 # d=d+c

6 128 sub $t0,$t0,$s3 # b=b-e

7 160 j WHILE

8 192 sub $t0,$t0,$s3 # b=b-e

9 224 EXIT:
```

Listing 1: Ensamblador MIPS-32

```
1 a=b-c;
2 if (b == c) {
3    while (c<=0) {
4         d=d+c;
5         b=b-e;
6    }
7    b=b-e;
8 }</pre>
```

Listing 2: C