

Ejercicio 5:

```

5) a) Fetch():
    MAR := PC
    MEM_READ
    IRO := MDR
    ALU_IN1 := PC
    ALU_IN2 := 0x0001
    ALU_add
    PC := ALU_OUT
    
```

```

b) Fetch():
    MAR := PC
    MEM_READ
    IRO := MDR
    ALU_IN1 := PC
    ALU_IN2 := 0x0001
    ALU_add
    PC := ALU_OUT
    if IRO[11] = 0:
        MAR := PC
        MEM_READ
        IRO := MDR
    else if IRO[16] = 1:
        if IRO[9] = 1:
            MAR := PC
            MEM_READ
            IRO := MDR
            ALU_IN1 := PC
            ALU_IN2 := 0x0001
        else:
            ALU_IN1 := PC
            ALU_IN2 := 0x0001
            ALU_add
            PC := ALU_OUT
        endif
    endif
    ALU_add
    PC := ALU_OUT
    endif
    
```