

```

msec:
    push w1
    mov #3998, w1
sloop:
    dec WREG1
    bra Z, end_loop
    bra sloop
end_loop:
    nop
    pop w1
return

```

2.

A.

- **CP** instruction cannot take a working register as single variable.
- Whether **BRA** instruction is true or false, the compiler will go over doInc loop to execute.

B.

- ADD instruction can add a number that represented by 5 bits to a WREG. The number giving is f34 hexadecimal that can't be represented by 5 bits in binary.

C.

- Whether **BRA** instruction is true or false, the compiler will execute doInc function. **BRA** is useless instruction.

D.

- Useless **loop**. There is no change in the variable (WREG5 and WREG6) inside the loop. Therefore, the loop will either execute once or twice if **CQSEQ** instruction has been met, or it will execute infinite times if the condition hasn't been met.