Problem FC-1 (2 parts)  

Part A: Draw the control flow graph corresponding to the following C code fragment. Be sure to draw the control flow determined by the compound predicate and the break.

```c
do {
    C = getc(FP);
    D = foo(C);
    if (C != 0 && (D/C < 100))
        D += C;
    else if (C > 105) {
        D = 0;
        break;
    } else
        D++;
} while (C != EOF);
Print_Stats(D);
```

Part B: Write a single C statement that corresponds to the following MIPS code. Assume $1$ holds $A$, $2$ holds $B$, $3$ holds $C$, and $4$ holds $D$.  Do not use an if-then-else.

```
bne $3$, $0$, Set
bne $1$, $0$, Reset
beq $2$, $0$, Reset
Set: addi $4$, $0$, 1
    j Continue
Reset: addi $4$, $0$, 0
Continue: ...
```

\[ D = C \lor (A \land B); \]