ECE 468
Problem Set 6: Dataflow analysis
    Consider the following code:

```
     1: READ(x);
     2: READ(y);
L1   3: if (x > 9) goto L4
     4:   if (y > 3) goto L2
     5:     x = 3 + x;
     6:     b = y + x;
     7:     goto L3
L2   8:     y = 3 + x;
     9:     b = y + x;
L3 10:   y = x + y;
    11:   goto L1;
L4 12: WRITE(b)
    13: halt
```

 1. Draw the CFG for this piece of code.

 2. Show the results of running a *reaching definitions* analysis on this code. For each line
    of code, show what definitions reach that line. Assume this is the only code in the
    program.

 3. Show the results of running a *liveness* analysis on this code. For each line of code,
    show what variables are live *out* for that line (i.e., what variables are live immediately
    after that line would execute)