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string buffer; # contains one line of input
bool done = false; # used to signal termination
co # process 1: find patterns
string line1;
while (true) {
    wait for buffer to be full or done to be true;
    if (done) break;
    line1 = buffer;
    signal that buffer is empty;
    look for pattern in line1;
    if (pattern is in line1)
        write line1;
}
// # process 2: read new lines
string line2;
while (true) {
    read next line of input into line2;
    if (EOF) {done = true; break; }
    wait for buffer to be empty;
    buffer = line2;
    signal that buffer is full;
}
oc;

```

**Figure 2.1** Finding patterns in a file.