

Here's an idea of how Vim reads input and transitions between modes. The actual code is much more complex but follows this basic flow:

```
while (1) {
    normal_mode_process_byte(getc());
}

void normal_mode_process_byte(char c) {
    if (c == 'i') // enter insert mode
        while (1) {
            insert_mode_process_byte(getc());
        }
}
```

What needs to be done is remove all those read loops and replace by a function (e.g., `process_byte(char c)`) that will buffer input, delegate to mode-specific input-handling functions or transition editor state when necessary. Something like this:

```
void process_byte(char c) {
    if (mode == NORMAL)
        normal_mode_process_byte(c);
    else if (mode == INSERT)
        insert_mode_process_byte(c);
    ...
}

void normal_mode_process_byte(char c) {
    if (c == 'i') {
        mode = INSERT;
        return;
    }
    ...
}
```

Think of the editor as a state machine: when input is read and fed into the machine, it may change the active buffer, transition mode, etc. The point is: the machine shouldn't call IO functions directly