```
while (condition) {              label1:  code to compute condition
      body                                branch to label2 if false
}                                         code to perform body
next statement;                           branch to label1
                                 label2:  code for next statement
```

(a)   (b)

Figure 9.4 (a) A *while* statement used in a high-level language, and (b) the equivalent assembly language code.