

```
while (condition) {  
    body  
}  
next statement
```

(a)

```
label1: code to compute condition  
        branch to label2 if not true  
        code to perform body  
        branch to label1  
label2: code for next statement
```

(b)

Figure 8.4 (a) A *while* statement used in a high-level language, and (b) the equivalent assembly language code.