Exercise 4.34

1) Replacing a **do...while** loop with an equivalent **while** loop:

The body of a **do...while** loop becomes the body of a **while** loop, and the contents of the body are repeated before the **while** loop. In a **do...while** loop, the body is executed at least once, whereas execution of the body in a **while** loop depends on the continuation condition.

do {
    statements
} **while** (*condition*);

becomes

statements
while (*condition*) {
    statements
}

To ensure that at least one loop is executed as in a **do..while** loop.

2) Replacing a **while** loop with an equivalent **do...while** loop:

Replacing a **while** loop with a **do...while** loop requires an **if** selection statement. The **do...while** loop would be the body of the **if** statement and the condition would be the same as the loop continuation condition in the **do...while**.

while (*condition*) {
    statements
}

becomes

if (*condition*) {
    do {
    statements
    } **while** (*condition*);
}

To ensure that every loop is executed only after the continuation condition is checked.

Exercise 4.35

The **break** statement leaves a loop from within the body of the loop. The other way to leave is by failing the loop-continuation test. Using in the loop-continuation test a second test that indicates “early exit because of a ‘**break**’ condition”.

Exercise 4.36