Chapter 3 (3.10)

**Similarities Between if and while Statements in Java:**

1. Both Use Conditional Expressions: They evaluate a boolean condition to determine whether to execute a block of code.

2. Both Control Program Flow: They influence how the program executes by deciding which statements run.

3. Both Can Contain Multiple Statements: They can execute a block of code enclosed in {} when the condition is met.

**Differences Between if and while Statements in Java:**

1. Execution Count: The if statement runs at most once, whereas the while loop can run multiple times until the condition becomes false.

2. Purpose: if is used for decision-making, whereas while is used for repetition.

3. Condition Evaluation: if checks the condition once when encountered, while while checks the condition before each iteration.