



# Flow of Control: Loops

## Chapter 4

# Java Loop Statements

- A portion of a program that repeats a statement or a group of statements is called a loop.
- The statement or group of statements to be repeated is called the body of the loop.
- There must be a means of exiting the loop.

# The **while** Statement

- Also called a **while** loop
- A **while** statement repeats while a controlling boolean expression remains true
- The loop body typically contains an action that ultimately causes the controlling boolean expression to become false.

# The **while** Statement

- Syntax

*while (Boolean\_Expression)  
    Body\_Statement*

*or*

*while (Boolean\_Expression)  
{  
    First\_Statement  
    Second\_Statement  
    ...  
}*

# The **do-while** Statement

- Also called a **do-while** loop
- Similar to a **while** statement, except that the loop body is executed at least once

- Syntax

```
do  
    Body_Statement  
while (Boolean_Expression);
```

- Don't forget the semicolon!