**Chapter 5**

**Knowledge Goals**

* To learn the equality, relational, and logical operators.
* To learn how to formulate conditions.
* To learn and understand DeMorgan’s laws.
* To learn how short-circuit evaluation works.
* To understand how to use the if, if/else, and if/else if selection structures.
* To understand rounding errors that can occur with floating-point calculations and how that affects comparisons of floating-point numbers.
* To understand how to compare the data in multiple objects.
* To learn how the conditional operator works.
* To learn how to use a switch statement.

**Skill Goals**

*To be able to:*

* Form simple and complex conditions using the equality, relational, and logical operators.
* Write the appropriate form of if, if/else, or if/else if to solve a problem.
* Develop test data and test an if, if/else, or if/else if statement for correctness.
* Compare floating-point numbers for equality using a threshold value.
* Use the equals, equalsIgnoreCase, and compareTo methods to compare Strings.
* Use the equals method to compare objects.
* Incorporate the conditional operator into a statement to make a decision.
* Write a switch statement.