Reading:
1. Deidel & Deidel, Chapter 5

Objectives:
1. The for repetition structure
2. The switch multiple selection structure
3. Do/while loops
4. Labeled Break and Continue Statements
5. Logical Operators

Concepts:
1. Discuss selection structures and need for easier incrementation
2. Discuss need for switch operator
3. Discuss logical operators
4. Overview of Lab 3
1. Counter Controlled Repetition
   • How they work
   • Necessary parts
   • Conditions

2. The for repetition structure
   • Allows for incrementation and exit parameter
   • Ease of use over while and counter combination
   • Show examples
   • Discuss use in programs

3. The switch Multiple- Selection structure
   • For use when if/else does not offer enough conditions
   • Can have a separate action for each value specified
   • Show examples

4. The do/while loop
   • Review while loop
   • Allows programmer to specify an action
   • Discuss advantages over while loop
   • Show examples

5. Break and Continue statements
   • How they work
   • Discuss uses in while, for, do/while and switch structures
   • Show examples

6. Logical Operators
   • What they are
   • Uses for multiple conditions
   • Show examples
   • Discuss their use in programs
Objectives:

1. To explore complex control structures
2. To use logical operators to form conditions

Students Activities:

1. Become familiar with complex control structures
2. Write a program that calculates the total sales for 5 products for the week and displays the totals upon the user entering the sentinel value of zero.

```java
//Lab 3
//Mail Order House Sales

class Sales{
    double p1 = 2.98, p2 = 4.50, p3 = 9.98, p4 = 4.49, p5 = 6.87;
    double sum = 0;
    int num, input, product;
    //comments needed here
    public static void main( String args[] )
    {
        input = JOptionPane.showInputDialog(  
            "Enter Product Number or 0 to sum sales");  
        product = Integer.parseInt (input);
        input = JOptionPane.showInputDialog(  
            "Enter Number sold");
        num = Integer.parseInt (input);

        {
            switch ( product ){

            case 1:
                sum += ( num * p1 );
                break;
            case 2:
                sum += ( num * p2 );
                break;
            
        }
    }
}```
case 3:
    sum += (num * p3);
    break;

case 4:
    sum += (num * p4);
    break;

case 5:
    sum += (num * p5);
    break;

//comment here

case 0:

    JTextArea outputArea = new JTextArea ( 1000, 20 );

    JScrollPane scroller = new JScrollPane ( outputArea );

    String output;
    output = “The total sales are: $” (sum);

    outputArea.setText ( output );

    JOptionPane.showMessageDialog ( null, scroller, “Mail Order Sales”, JOptionPane.INFORMATION_MESSAGE );

    break;

//comment here

System.exit ( 0 );

//comment here

//comment here