Objectives:
1. To become familiar with the basics of Java Primitive Data Types.
2. To gain familiarity with various Java methods types, variables, assignments, expressions and Java Input / Output Device.
3. To understand how a Java application is composed of a class with one or more methods.
4. To understand the difference between syntax and semantics.
5. To see how precedence rules affect the order of evaluation in an expression.

Reading Assignment:
1. Nell/Chip/Marsh, Chapter 2 and 3.

Concepts:
1. Overview of Java Primitive Data Types
2. Types of Methods
3. Variables, Assignment, Expressions and Java I/O Device
4. Arithmetic Expression
1. Overview of Java Primitive Data Types
   - Integral Types – byte, char, short, int, long.
   - Boolean – Range True or False.
   - Floating Point Types – float, double.
   - Samples of Java Data Values.
   - Example Java program demonstrating char, int, float, and double types.
   - Assignment: Primitive Types vs Objects.

2. Types of Methods
   - Methods definition – Explain methods declaration syntax, Why methods?
   - Give an example of method using the sample Java program - OneMethod.
   - Class Methods.
   - Instance Methods.
   - Constructors.
   - Void Methods.
   - Value-Returning Methods.
   - Helper Methods.
   - Calling (Invoking) a Method.

3. Variables, Assignment, Expressions and Java I/O Device
   - Variables - What is a Variable? Give an example of Variable. What does a variable declaration do? Demonstrate using an assignment operator to assign value to a variable.
   - Syntax for Declarations – Variable Declaration, Constant Declaration.
   - Java String Class – Action’s of Java String class, String Concatenation.
   - Assignment and Expressions.
   - Assignment Statement Syntax and Examples.
   - Java Input / Output Device – Its application and usage.
   - Interactive Input and Output.

4. Arithmetic Expression
   - What is an Arithmetic Expression?
   - Example of Arithmetic Expression.
   - Division and Modulus Operator.
   - Examples of other Java Operators – Arithmetic Operators.
   - Role of Precedence in Arithmetic Expression.
   - What is Associativity?
   - Give an example to evaluate the expression.
Objectives:
1. To explore the Java programming environment.
2. To demonstrate understanding of basic data structures types.

Student Activities:
1. Become familiar with the Java programming environment.
2. Perform the Nell Dale Chapter 2 Exercise 6 to fill in the pieces from the Exercise 1-5 into TextMessage. Compile and run application TextMessage.

Lab Solution:

```java
import java.io.*;
public class TestMessage
{
static class Message
{
    String message;
    String name;
    BufferedReader in;
    public void getName() throws IOException
    {
        in = new BufferedReader(new InputStreamReader(System.in));
        System.out.println("Enter name:");
        name = in.readLine();
    }
    public void getMessage() throws IOException
    {
        System.out.println("Enter message:");
        message = in.readLine();
    }
    public void printMessage()
    {
        System.out.println("Hello " + name);
        System.out.println( message);
    }
}
public static void main(String[] args) throws IOException
{
    Message text;
    text = new Message();
    text.getName();
    text.printMessage();
}
}
```