

# Hands-on Activity Blood Bank (Part 2)

### Objective:

At the end of the activity, the students should be able to:

Apply encapsulation to a program.

## **Software Requirements:**

- Latest version of NetBeans IDE
- Java Development Kit (JDK) 8

#### **Procedure:**

- 1. Modify your program from **04 Hands-on Activity 1** to apply encapsulation. Make **bloodType** and **rhFactor** non-static and private. Remove the constructor with two (2) parameters.
- 2. The names of the public setter and getter methods should be:
  - setBloodType()
  - setRhFactor()
  - getBloodType()
  - getRhFactor()
- 3. Use the setter methods to accept user input.
- 4. Display the values by calling the getter methods.

## **Sample Output:**

```
Enter blood type of patient:
Enter the Rhesus factor (+ or -):
O+ is added to the blood bank.
Enter blood type of patient: B
Enter the Rhesus factor (+ or -): -
B- is added to the blood bank.
```

## **GRADING RUBRIC (100 points):**

| Criterion   | Description  | Max Points |
|-------------|--|------------|
| Correctness | The code produces the expected result.                         | 40         |
| Logic       | The code meets the specifications of the problem.              | 40         |
| Efficiency  | The code is concise without sacrificing correctness and logic. | 10         |
| Syntax      | The code adheres to the rules of the programming language.     | 10         |

05 Hands-on Activity 1 \*Property of STI