CSE111 Summer 2025 LAB Exam 01 Tentative Solutions

In case of any circumstance not present in the rubrics, feel free to discuss in the theory faculty slack channel. This rubric is provided to maintain a similar marking scheme throughout all sections. **You are free to use your best judgement while evaluating**.

1.1 Set A (Coding) Tentative Solution

```
public class FuelDispenser {
     public String stationName;
     public int fuelLevel;
     public boolean needsRefill;
     public void setDetails(String stationName, int fuelLevel) {
         this.stationName = stationName;
         this.fuelLevel = fuelLevel;


         if (this.fuelLevel < 10) {
             needsRefill = true;
         } else {
             needsRefill = false; }
     }
     public void dispense(int liters) {
         if (fuelLevel >= liters) {
             System.out.println("Dispensing " + liters + " liters...");
             fuelLevel = fuelLevel - liters;
         } else {
             System.out.println("Not enough fuel to dispense " + liters + " liters!");
         }
         if (fuelLevel < 10) {
             needsRefill = true;
         } else {
             needsRefill = false;}
     }
     public void status() {
         System.out.println("Station name: " + stationName);
         System.out.println("Fuel left: " + fuelLevel + " liters");
         System.out.println("Needs refill? " + needsRefill);
     }
 }
```

CSE111 Summer 2025 LAB Exam 1 Tentative Rubrics

1.2 Rubric for Set A (Coding)

SL	Points to Meet	Marks (10)
1	Correct use of instance variables	2
2	Correct dispense logic and fuel reduction	2.5
4	Proper update of needsRefill flag in both methods	2
5	Output	1.5
6	Method structure and naming consistency	1
7	Correct setDetails logic	1
Total		**10**

2.1 SET B (Coding) Tentative Solution

```
public class JuiceMachine {
    public String name;
    public int juiceLevel;
    public boolean needsRefill;
    public void setDetails(String name, int juiceLevel) {
        this.name = name;

            this.juiceLevel = juiceLevel;


        if (this.juiceLevel < 2) {
            needsRefill = true;
        } else {
            needsRefill = false;
        }
    }
    public void serveJuice(int amount) {
        if (juiceLevel >= amount) {
            System.out.println("Serving " + amount + " glasses...");
            juiceLevel = juiceLevel - amount;
        } else {
            System.out.println("Not enough juice to serve " + amount + "
glasses!");
        }

        if (juiceLevel < 2) {
            needsRefill = true;
        } else {
            needsRefill = false;
        }
    }
    public void status() {
        System.out.println("Machine name: " + name);
        System.out.println("Juice left: " + juiceLevel);
        System.out.println("Needs refill? " + needsRefill);
    }
}
```

2.2 Rubric for Set B (Coding)

SL	Points to Meet	Marks (10)
1	Correct use of instance variables	2
2	Correct serve logic and juice level reduction	2.5
4	Proper update of needsRefill flag in both methods	2
5	Clear and informative output messages	1.5
6	Method structure and naming consistency	1
7	Correct setDetails logic	1
Total		**10**