

## **SPOT for Expt 1a**

### **1Marks Percentage and Grade Calculator**

A student appears for five subjects in an exam. You are asked to create a Java code segment that stores the marks of all five subjects using appropriate data types and variables, calculates the total and percentage, and then prints the result. Use expressions and operators appropriately.

### **Mobile Recharge System**

A mobile service provider wants to build a basic billing system to compute the final amount a customer has to pay after recharging. The system should take into account the base recharge amount, applicable taxes, and a promotional discount. Write a Java program that:

Declares appropriate **variables** to store:

- Base recharge amount (e.g., ₹199)
- Tax rate (e.g., 18%)
- Promotional discount (e.g., ₹20)

Uses **Java data types** appropriately (e.g., int, float, double).

Applies **arithmetic operators** to compute:

- Tax amount
- Total cost before and after discount

Displays the breakdown:

- Base amount
- Tax amount
- Discount
- Final amount to be paid

## **SPOT for Expt 1b**

### **Voting System Summary**

In a local election, 5 candidates receive votes from different polling booths. Write a Java program that Stores vote counts for each candidate in an array.

Calculates and displays the total votes.

Identifies the winning candidate (max votes).

Displays the percentage of votes each candidate received.

### **Sales Performance Tracker**

A company records the monthly sales of a salesperson for 12 months. Create a Java program that:

- ◆ Stores sales values in a 1D array.
- ◆ Calculates total and average sales.
- ◆ Displays months with sales above average.
- ◆ Finds the best-performing month (highest sales).