

CS23304 –Java Programming Laboratory – N batch

Introduction to Java Basics

Exercise-I – ON THE SPOT

Date: 16.7.25

Marks: 10 marks

1. Use a one-dimensional array to solve the following problem: A company pays its salespeople on a commission basis. The salespeople receive \$200 per week plus 9% of their gross sales for that week. For example, a salesperson who grosses \$5,000 in sales in a week receives \$200 plus 9% of \$5,000, or a total of \$650. Write an application (using an array of counters) that determines how many of the salespeople earned salaries in each of the following ranges (assume that each salesperson's salary is truncated to an integer amount):

- a) \$200–299
- b) \$300–399
- c) \$400–499
- d) \$500–599
- e) \$600–699
- f) \$700–799
- g) \$800–899
- h) \$900–999
- i) \$1,000 and over

Summarize the results in tabular format.

2. Drivers are concerned with the mileage their automobiles get. One driver has kept track of several trips by recording the miles driven and gallons used for each tankful. Develop a Java application that will input the miles driven and gallons used (both as integers) for each trip. The program should calculate and display the miles per gallon obtained for each trip and print the combined miles per gallon obtained for all trips up to this point. All averaging calculations should produce floating-point results. Use class Scanner and sentinel-controlled repetition to obtain the data from the user.