

## CMPE-CMSE416 OOP & GUI wit Java

Due date: 9.8.2022

Q1. Objective: The program receives 6 numbers from the user, finds the largest number and counts the occurrence of the largest number entered.

Suppose you entered 3, 5, 2, 5, 5, and 5, the largest number is 5 and its occurrence count is 4.

Q2. Objective: read student scores (int), get the best score, and then assign grades based on the following scheme:

- Grade is A if score is  $\geq \text{best} - 10$ ;
- Grade is B if score is  $\geq \text{best} - 20$ ;
- Grade is C if score is  $\geq \text{best} - 30$ ;
- Grade is D if score is  $\geq \text{best} - 40$ ;
- Grade is F otherwise.

Part1. Use Scanner Class for inputs.

Part2. Use JOptionPane for inputs.

Q3. Write a Java Program that solves the following problem:

Assume a company pays an annual bonus to its employees. The bonus is based on the number of years the employee has been with the company. Employees working at the company for less than 5 years receive a bonus equal to 1% percent of their salary; all others receive a bonus equal to 2% of their salary. Provide a flowchart which shows how an employee's bonus is calculated. Include reading in appropriate data and printing an output message that mimics the format of the following message, where *<bonus-value>* represents the numeric value for the bonus:

Congratulations! Your bonus is \$*<bonus-value>*.