

PRACTICAL SESSION 4

1. Write a program that reads the performance level of an employee (between 0 and 100) and his salary. Then it increases the salary by 3% if performance level is greater than or equal to 90.

Here are two sample runs:

```
Enter performance level: 50 ↵
Enter base salary: 5000 ↵
Salary is 5000.0
```

```
Enter performance level: 90 ↵
Enter base salary: 10000 ↵
Salary is 10300.0
```

2. Write a Java program that requests an integer value from the user. If the value is between 1 and 100 inclusive, print "OK;" otherwise, print "Out of range."
3. Write a program that reads **three** numbers and prints the largest number
4. Write a Java program that requests five integer values from the user. It then prints one of two things: if any of the values entered are duplicates, it prints "DUPLICATES"; otherwise, it prints "ALL UNIQUE".
5. Write a Java program that determines a student's grade.

The program will read three types of scores (quiz, mid-term, and final scores) and determine the grade based on the following rules:

- if the average score  $\geq 90\%$   $\Rightarrow$  grade=A
- if the average score  $\geq 70\%$  and  $< 90\%$   $\Rightarrow$  grade=B
- if the average score  $\geq 50\%$  and  $< 70\%$   $\Rightarrow$  grade=C
- if the average score  $< 50\%$   $\Rightarrow$  grade=F

See the example output below:

Quiz score: 80

Mid-term score: 68

Final score: 90

Your grade is B.

6. A certain college classifies students according to credits earned. A student with less than 7 credits is a Freshman. At least 7 credits are required to be a Sophomore, 16 to be a Junior and 26 to be classified as a Senior. Write a program that calculates class standing from the number of credits earned.
7. The speeding ticket fine policy in Podunksville is \$50 plus \$5 for each mph over the limit plus a penalty of \$200 for any speed over 90 mph. Write a program that accepts a speed limit and a clocked speed and either prints a message indicating the speed was legal or prints the amount of the fine, if the speed is illegal.