CMSC 131 Quiz 1 Worksheet

The first quiz for the course will be on Wed., June 12 at 6 PM. The following list provides additional information about the quiz.

- The quiz will be a mini project. Directions will be posted on piazza at 6 PM on June 12. You will download the startup folder, write 2 programs, and submit to the submit server. You will have 6 release tokens. The quiz will have 6 release tests at 5 points each. The total for the quiz is 30 points and it is 5% of your grade.

- You must submit the quiz before 7:20. You can submit between 7:20 and 7:30, but it will be late with a 5 points deduction. You will get 0 if you have no submission prior to 7:30. You must submit code that compiles. If your code does not compile, even if 99% perfect, you will still get a zero. You can submit it as many times as you want. Like projects, we will grade the highest one. There are no style points for the quiz. Just pass the 6 release tests within the allowed time and you will get 100%.

- You may use all resources allowed on a normal project. You can refer to the videos, use your own project code or example code, and view the slides. However, asking another person to help you write the code or looking for code on the Internet is not allowed.

- You do not have to be on campus to take the quiz. You can take it anywhere that has Internet access.

- Regarding Piazza – A TA will monitor piazza from 6 to 7:20, if you have a question post a private post. If something needs to be clarified for all students, we will make a public announcement via piazza.

- In order to prepare for the quiz, make sure you are comfortable with the content of project 1 and project 2, and have watched the videos for Week 1 and Week 2.

Exercises – Solutions to these exercises will not be provided, but you are welcome to discuss your solutions with the TAs during office hours. For input use the Scanner class and for output System.out.println.

1. Write a program that asks the user for a password value; the expected value is "terps". If the user provides the expected value, the program will print the message "Access Granted"; otherwise the program will print the message "Access Denied."

2. Write a program that reads two integer values (using the Scanner class) and prints "Y" if the first value is divisible by the second, and "N" otherwise.

3. Complete the program below. The program reads an integer value and prints the square if the value if greater than 0; otherwise the message "Invalid value" will be printed. Notice the quotes must surround the words Invalid value. For example, if the user enters 5, the program will print 25. You don’t need good variable names, but you need good indentation.

   ```java
   public class Square {
       public static void main(String[] args) {
   ```

4. Complete the program below that computes tuition cost. The program will read the cost per credit (in dollars) using the message "Enter cost per credit: " and the number of credits using the message "Enter number of credits: ". If the number of credits is larger than or equal to 18, the cost per credit will be reduced by half. The program will display the amount to pay using the message "Please pay: " followed by the amount. Remember that the Scanner methods nextDouble() and nextInt() allow you to read a double and an integer, respectively. The following are examples of running the program. Underlined text represent input provided by the user.

   ```java
   Enter cost per credit: 30.50
   Enter number of credits: 2
   Please pay: 61.0
   Enter cost per credit: 2
   Enter number of credits: 18
   Please pay: 18.0
   ```

   ```java
   public class ComputeTuition {
       public static void main(String[] args) {
           Scanner scanner = new Scanner(System.in);
   ```