

CMSC 131 Quiz 1 Worksheet

The first quiz for the course will be on Thurs, Feb 9. The following list provides additional information about the quiz:

- The quiz will be a written quiz (no computer).
- **The quiz will be in lab / discussion session.**
- Closed book, closed notes quiz.
- Answers must be neat and legible.
- The quiz has a maximum duration of 20 minutes.
- Make sure you know your section number and your discussion TA's name. Bring your student id.
- You must take your quiz in your assigned lab / discussion session and not show up to a random one. We will not grade quizzes taken in the incorrect section.
- Please do not discuss a quiz after you have taken it.
- Please do not post about the quiz on piazza.

The following exercises gives you practice with concepts that may show up on the quiz. Solutions to these exercises will not be provided, but you are welcome to discuss your solutions with the TAs during office hours. It is recommended that you try these exercises on paper first (without using a computer).

Exercises

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. Complete the program below. The program reads an integer value and prints the square if the value is 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.

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

3. What is 75 in base 2? Base 8? Base 16?

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.

```
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
```

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

You need to know all material covered in lecture/lab in Week 1 and Week 2.

Old Quizzes are here: <http://www.cs.umd.edu/class/spring2023/cmsc131/quizzes/oldQuiz1.zip>