## Java 2 Self-Test

Write 3 Java projects based on each of the specified requirements. All 3 projects need to be completed (including testing) in 1 hour or less.

1. Project \#1: Number divisibility
a. Ask user for 2 inputs:
i. The dividend number
ii. The divisor number
b. Display whether or not the dividend is divisible by the divisor
c. Don't forget to have a way for the user to exit the program. For example: enter "e" to exit
d. Example: enter 17331 as the dividend and 3 as the divisor. This program should display the following output: 17331 is divisible by 3
2. Project \#2: Find the LCM (Least Common Multiple)
a. Ask user for 2 inputs:
i. The $1^{\text {st }}$ number
ii. The $2^{\text {nd }}$ number
b. Calculate and display the LCM of the 2 numbers
c. Don't forget to have a way for the user to exit the program. For example: enter "e" to exit
d. Example: find LCM $(8,12)$. Enter 8 as the $1^{\text {st }}$ number and 12 as the $2^{\text {nd }}$ number. This program should display the following output: The LCM $(8,12)$ is 24
3. Project \#3: Guess the number game
a. Use random function to generate a number between 1 and 10 unknown to user
b. Ask user for a number between 1-10
c. If the user input is the same with the number that the computer generate, then display a positive message, such as "Nice job! You guessed it!
d. If the user input is not the same, then display a try again message, such as "Not quite right, but nice try though"
e. Don't forget to have a way for the user to exit the program. For example: enter "e" to exit
