

Lab 23

Instructions: Complete the steps below. Be sure to show your code to one of the lab TAs before you leave, so that you can receive credit for this lab. You must also upload a copy of all your source code (.java) files to the link on Blackboard by **11:59 PM on Monday November 30, 2020 for L01, L02, L03, L05 and by 11:59 PM on Thursday November 19, 2020 for L06, L07, L08 and L09.**

1. Write a method that converts a decimal number into a binary number as a string. The method header is:

```
public static String dec2Bin(int value)
```

Write a test program that prompts the user to enter a decimal number and displays its binary equivalent.

2. Write a method that parses a binary number as a string into a decimal integer. The method header is:

```
public static int bin2Dec(String binaryString)
```

Write a test program that prompts the user to enter a binary string and displays its decimal equivalent.

Grading Guidelines: This lab is graded on a scale of 0-6 points, assigned as follows:

- **0 points:** Student is absent or does not appear to have completed any work for the lab
- **2 point (2*1):** Student has written the program, but it has errors.
- **4 points (2*2):** Student has written the program it compiles without error, but it does not produce the correct output.
- **6 points (2*3):** Student has written the program and it compiles and runs correctly, without any errors.