**Name**

**Advanced Programming in Java**

**Lab Exercise 10/28/2024**

In this exercise you will continue working with arrays. When you have completed your programs, submit your source code. Include a screen shot for problem 3.

1. Write a method that actually reverses an array. For example, if the array has 5 elements containing 42, 16, 34, 12 and 92 it should be reversed so that it contains 92, 12, 34, 16, and 42. Write a main method to test your method.
2. Write a program that simulates the roll of two dice. You should use the Math.random method to simulate the roll of each die which may have a value of 1 to 6 (the roll of the two die will have a total in the range of 2 to 12. Your program should allow the user to enter the number of rolls that are to be done. It should keep track of the number of times each value from 2 to 12 occurs. Hint: Use an array of 13 elements with the value of the roll referencing the particular element of the array to have its count incremented. Don’t forget to initialize all array elements to 0. Your program should print a report specifying the percent of time a particular value occurred.
3. Modify the above program to print out a histogram that pictorially represents the frequency of occurrence of each value. Hint: Use an applet or standalone application with the drawRectangle method.

