**Lab Practice 6**

**Chapter Method**

**Question 1**

1. Create a method that receives an integer number. This method will identify whether the number is Odd or Even and returns the status of the number to the caller.
2. Write statement to call the method created at (a) and display the status of the number.

**Question 2**

*(Sort three numbers*) Write a method with the following header to display three

numbers in decreasing order:

public static void displaySortedNumbers(double num1, double num2, double num3)

Write a test program that prompts the user to enter three numbers and invokes the method to display them in decreasing order.

**Question 3**

(*Display patterns*) Write a method to display a pattern as follows:

1

1 2

1 2 3

...

n n−1 ... 3 2 1

The method header is public static void displayPattern(int n)

**Question 4**

(*Financial application: compute the future investment value*) Write a method that computes future investment value at a given interest rate for a specified number of years. The future investment is determined using the formula in Programming Exercise 2.21 (Text book Liang).

Use the following method header:

public static double futureInvestmentValue(

double investmentAmount, double monthlyInterestRate,int years)

For example, futureInvestmentValue(10000, 0.05/12, 5) returns

12833.59.

Write a test program that prompts the user to enter the investment amount (e.g., 1,000) and the interest rate (e.g., 9%) and prints a table that displays future value for the years from 1 to 30, as shown below:

The amount invested: 1000

Annual interest rate: 9

Years Future Value

1 1093.80

2 1196.41

...

29 13467.25

30 14730.57