**Lab-Sheet 4**

1. Write a program that creates an integer array of length 30, fills the array with the sequence 1,-2,3,-4,…..29,-30 using a for loop. Also print the above sequence using for loop
2. Write a program that creates two integer arrays **data1** and **data2**, possibly of different lengths. Then it uses for loops to create a new array **data3** whose length is the sum of the lengths of **data1** and **data2** and whose contents consists of the contents of **data1** followed by contents of **data2**. For example, if the two arrays are {1,2,3} and {4,5,6,7}, then the code should create the new array {1,2,3,4,5,6,7}.
3. Write a program that creates an integer array and then uses a for loop to check whether the array is sorted from smallest to largest. If so, print sorted. Otherwise, prints “Not sorted”.
4. Create a class **Number** with two int instance variable x and y. The class will have one constructor. The class also will contain member function **getMax()** that will return larger number. In main function create an object of **Number** and will print the larger number.
5. Create a class **Number** with three int instance variable **x** ,**y** and **z**. The class will have one constructor. The class also will contain member function **getMax()** that will return larger number. In main function create an object of **Number** and will print the largest number.
6. Create a class **Swapper** class with two integer instance variable**x** and **y** and constructor with two parameters that initializes the two variables. Also include three member functions: A **getX ()** that returns x, a **getY ()** function that returns y, a void **swap ()** method that swaps the values of **x** and **y**. Then define a main() function to create an object of Swapper class and swap the value of instance variables