

CSCE 145 Lab 14

Arrays of Integers and Characters

Objectives

The goal of this lab is to learn how to use *arrays* in Java.

Instructions

There are two parts to this lab, one involving an integer array and one involving a character array.

1. Create a class called **Weather** and include in it an instance variable named *temperature* that is an array of 5 integers.
2. Create a method *calcAverage* that takes an integer array as input and returns the average temperature (double) of the array.
3. Create a method *printArray* that takes an integer array as input and prints all the values in it.
4. In a *main* method, ask the user to input 5 temperature values; store these in the integer array. Then invoke the *printArray* method and the *calcAverage* method. Also, print the average.

Assuming you have written everything correctly, your output should look like this:

Welcome to the Average Temperature Program

Please enter 5 temperatures.

Enter temperature 1: 10

Enter temperature 2: 25

Enter temperature 3: 48

Enter temperature 4: 87

Enter temperature 5: 63

Average temperature: 46.6

Temperatures in the array: 10 25 48 87 63

Thank you for using this program, goodbye.

Create a class called **Backward** and include in it an instance variable named *charsIn* that is an array of 80 characters and an instance variable *charsOut* that is also an array of 80 characters.

Create a method *reverse* that takes whatever is stored in the instance variable *charsIn* and stores the

exact reverse of it in *charsOut*.

In a *main* method, ask the user to enter up to 80 characters, store them in *charsIn*, invoke *reverse()*, and then print whatever is in *charsOut*.

Assuming you have written everything correctly, your output should look like this:

Welcome to the Talking Backward Program

Please enter from 1 to 80 characters.

> This is a test of reverse.

The reverse is

> esrever fo tset a si sihT

Goodbye.

Once your programs are working, upload the code to the dropbox at <https://dropbox.cse.sc.edu>.