# Lab 6: Chapter 7, “Arrays”

The following exercises are intended to help you apply and practise the concepts introduced in this module. This work is **not** submitted for marks. The questions are from the end of the chapter in your text under the “Exercises” or “Programming Projects” headings.

Try to answer the questions on paper first. Insert the code in a Java program to see the actual result.

1. Which of the following are valid declarations? Which instantiate an array object? Explain your answers.

int primes = {2, 3, 5, 7, 11};  
float elapsedTimes[ ] = {11.47, 12.04, 11.72, 13.88};   
int[ ] scores = int[30];  
int[ ] primes = new {2, 3, 5, 7, 11};  
int[ ] scores = new int[30];  
char grades[ ] = {'a', 'b', 'c', 'd', 'f'};  
char[ ] grades = new char[ ];

1. Describe what problem occurs in the following code. What modifications should be made to it to eliminate the problems?

int[ ] numbers = {3, 2, 3, 6, 9, 10, 12, 32, 3, 12, 6};  
for (int count = 1; count <= numbers.length; count++)  
 System.out.println (numbers[count]);

1. Write code that sets each element of an array called nums to the value of the constant INITIAL.

1. Write code that prints the values stored in an array called names backwards.

1. Write code that sets each element of a boolean array called flags to alternating values (true at index 0, false at index 1, etc.).

1. Write a method called sumArray that accepts an array of floating point values and returns the sum of the values stored in the array.

Review your work by viewing the solution sheet.