**Exercises**

**Arrays & Loops**

**Exercise 1**

Write an application that initializes an array with 10 integers values 10,20,30,40,50,60,70,80,90,100 and then prints the following:

Every element at an even index

Every even element

All elements in reverse order

Only the first and last element

**Exercise 2**

Write a program that reads in 5 scores and shows how much each score differs from the highest score.

**Exercise 3**

In the array

double [] score = new double [10];

what is

a. the value of score.length ? 10

b. the first index of score ? 0

c. the last index of score ? 9

**Exercise 4**

What is the output of the following code?

char [] letter = {'a', 'b', 'c'};

for ( int index = 0; index < letter.length; index++)

System.out.print(letter[index] + ", ");

a,b,c

**Exercise 5**

What is the output of the following code?

double [] a = {1.1, 2.2, 3.3};

System.out.println(a[0] + " " + a[1] + " " + a[2]);

a[1] = a[2];

System.out.println(a[0] + " " + a[1] + " " + a[2]);

* 1. 2.2 3.3

1.1 3.3 3.3

**Exercise 6**

What is wrong with the following piece of code?

int [] sampleArray = new int [10];

for ( int index = 1; index <= sampleArray.length; index++)

sampleArray[index] = 3\*index;

**Exercise 7**

Write a program to compute different statistics from monthly rainfall averages

Create an array that stores the names of the months, an array to store user inputted monthly rainfall averages, an array that stores quarterly averages.

The program should

* Input and store monthly rainfall average
* Calculate and output annual average
* Compute and output the average for the even month numbers
* Compute and output the average for the odd month numbers
* Compute and output the average for each quarter