



Here are the solutions for Tutorial 3:

## Question 1: Declare an array of type double, with 10 elements, and display the contents of the array

```
public class DoubleArrayDisplay {
    public static void main(String[] args) {
        // Declare an array of 10 double elements
        double[] numbers = {10.5, 20.2, 30.3, 40.4, 50.5, 60.6, 70.7, 80.8, 90.9, 100.0};

        // Use a for loop to display the contents of the array
        System.out.println("Array contents:");
        for (int i = 0; i < numbers.length; i++) {
            System.out.println(numbers[i]);
        }
    }
}
```

## Question 2: Declare an array of type float with 5 elements for monthly sales income in thousands of pounds

```
import java.util.Scanner;

public class MonthlySales {
    public static void main(String[] args) {
        // Declare an array to hold 5 float elements
        float[] sales = new float[5];
        Scanner input = new Scanner(System.in);

        // Input the monthly sales income
        System.out.println("Enter the monthly sales income (in thousands of pounds):");
        for (int i = 0; i < sales.length; i++) {
            System.out.print("Month " + (i + 1) + ": ");
            sales[i] = input.nextFloat();
        }

        // Display the contents of the array
        System.out.println("\nMonthly Sales Income:");
        for (int i = 0; i < sales.length; i++) {
            System.out.println("Month " + (i + 1) + ": " + sales[i] + " thousand pounds");
        }
    }
}
```

**Question 3: Program to input integers into an array and display the smallest and largest value**

```
import java.util.Scanner;

public class MinMaxArray {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);

        // Ask the user for the number of integers
        System.out.print("Enter the number of integers: ");
        int n = input.nextInt();

        // Declare an array to hold the integers
        int[] numbers = new int[n];

        // Input values for the array
        System.out.println("Enter the integers:");
        for (int i = 0; i < n; i++) {
            numbers[i] = input.nextInt();
        }

        // Initialize variables to store the smallest and largest numbers
        int smallest = numbers[0];
        int largest = numbers[0];

        // Loop to find the smallest and largest numbers
        for (int i = 1; i < numbers.length; i++) {
            if (numbers[i] < smallest) {
                smallest = numbers[i];
            }
            if (numbers[i] > largest) {
                largest = numbers[i];
            }
        }

        // Display the results
        System.out.println("Smallest number: " + smallest);
        System.out.println("Largest number: " + largest);
    }
}
```

Let me know if you need any further explanations or modifications to these programs!