**C# Semester 2 Arrays – worksheet 2**

Q1

Write the following methods that take an array of ints as a parameter and returns

1. The largest value in the array (don’t use the built in Max property, code it yourself)
2. The smallest value in the array (don’t use the built in Min property, code it yourself)
3. True if the array is sorted in ascending order otherwise false
4. The average of every third element in the array, starting with the first element
5. The standard deviation of all the values stored in the array (check out your maths notes or Math or [www.MathisFun.com](http://www.MathisFun.com)

Write code to test your methods with the array:

int[] testArray = {7,3,6,2,9};// creates array initialised with values

Q2

Using a 2 dimensional array, write a program to store the goals that 5 players scored in 4 different matches. Print out report with the format below:

Player # Match 1 Match 2 Match 3 Match 4

1 0 2 4 1

2 3 2 4 1

3 2 0 4 1

4 1 2 4 0

5 3 0 0 0

Totals 9 6 16 3

Modify the report to show the player names, 1= “Pat”,2 = “John”, 3 = “Kim”, 4 = “Betty”, 5 = “Ivana”) Hint initialise an array with these

Q3

A shop requires a program that determines how many customers have made purchases in each of the following ranges:

0-99.99 euro, 100-199.99 euro ,200-399.99 euro,400-599.99 euro and 600+

Your program should make uses of array(s) where appropriate and include a number of methods.

**Example input dialog**

Enter sale Amount (-999 to quit) : 150

Enter sale Amount (-999 to quit) : 50

Enter sale Amount (-999 to quit) : 250

Enter sale Amount (-999 to quit) : 650

Enter sale Amount (-999 to quit) : 350

Enter sale Amount (-999 to quit) : -999

**Example Output :**

*Sale Amount Report*

*Range Number in Range*

*000-99.99 2*

*100-199.99 1*

*200-399.99 2*

*400-599.99 0*

*600+ 1*