**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
2. The smallest value in the array
3. Tue if the array is sorted otherwise false
4. The average of every third element in the array
5. The standard deviation of all the values stored in the array

Write code to test your array.

Q2

Using a 2 dimensional array, write a program to store the goals that 11 players scored in 5 different matches. Print out the details for all players

Q3

A shop requires a program to generate sales receipts.

For each transaction, the program will read in the product code, the quantity purchased and output a receipt in the format shown below. A customer may buy up to four different products in a single transaction.

Use arrays in your solution

The cost of the products are listed below

|  |  |  |
| --- | --- | --- |
| **Product Code** | **Product Name** | **Unit Price** |
| 1 | Tee-Shirt | 20 |
| 2 | Headphones | 200 |
| 3 | Go-Pro Camera | 250 |
| 4 | Skateboard | 300 |

Discounts are offered based on the total value of the sale

|  |  |
| --- | --- |
| **Total Sale** | **Discount Amt** |
| 0.01 – 100 | 0% |
| 100.01 – 300 | 5% |
| 200.01 – 500 | 10% |
| >500 | 15% |

Receipt

Product Qty Unit Price Amt

Tee-Shirt 2 20 40.00

Skateboard 1 300 300.oo

Sub Total 340.00

Discount 34.00

Total Due 306.00