

INSTITIÚID TEICNEOLAÍOCHTA, SLIGEACH  
INSTITUTE OF TECHNOLOGY, SLIGO



**School of Engineering & Design**

Head of School:

Mr Shane Fanning

Exam Series: Summer

Academic Year: 2014/2015

**Course:** BSc Computing- Software Development  
BSc Computing-System & Networking  
BSc Computing-Web Development  
BSc Computing-Games Development

**Stage:** Semester 2

**Subject:** Introduction to Programming 2 with C#

**Internal Examiner(s):** Vivion Kinsella

**External Examiners:** Damien Costello

**Instructions to Candidates**

**Time Allowed:** 2.5 hours

**Number of Questions on Paper:** 2

**Number of Questions to be attempted:** 2

**Compulsory Question:** Question 1 & 2

**Any Other Special Instructions:** See Next Page

## INSTRUCTIONS

Ensure you put your name and student number in your code.

Rename your code files **Question1.cs** and **Question2.cs**

When finished upload both these files only to the moodle link on week starting May 25th on the course moodle page.

**YOU ARE RESPONSIBLE TO ENSURE YOU SAVE YOUR WORK CORRECTLY**

**Question 1. (50 Marks)**

Write a program that asks the user to enter the scores of five game players. The program shall then

- i) Display a bar chart comparing each players score. Create each bar chart by displaying a row of asterisks. Each asterisk represents 100 points.
- ii) Display the total combined points for all players.
- iii) Display the average score for each player.
- iv) Display the highest score achieved.

Example Dialogue:

```
Enter score for player 1: 1000
Enter score for player 2: 1200
Enter score for player 3: 1800
Enter score for player 4: 800
Enter score for player 5: 1900
```

Score Bar Chart

```
Player1 *****
```

```
Player2 *****
```

```
Player3 *****
```

```
Player4 *****
```

```
Player5 *****
```

```
Total Score : 6,700.00
```

```
Average Score 1,340.00
```

```
Highest Score 1900
```

**Marks**

Correctness (30)

Design/coding/data structures (15)

Programming Style (5)

**Question 2. (50 marks)**

A concert venue stores data about all its ticket sales in a comma delimited sequential file `ticketsales.txt` with the format:

Sale ID, Ticket Type, Quantity Sold.

An example copy with the data below may be found on `s:\classes\vkinsella\examdata`

001,T1,4      *(this indicates that the sale with a saleId of 001, was for 4 tickets of type T1)*  
002,T2,6  
003,T3,7  
004,T3,5  
005,T1,6  
006,T2,7  
007,T4,2

The venue has 4 ticket types, they have the following prices

TypeCode	Price
T1	40.0
T2	45.00
T3	55.00
T4	60.00

Write a program to read all the records from the file and determine the total sales value for each ticket type and the total combined retail value for all the tickets sold.

For the above file, your output will be in the format specified below.

Ticket Type	Total Retail value
T1	400.00
T2	585.00
T3	660.00
T4	120.00
Total	1,765.00

**Marks**

Correctness (30)

Design/coding structures (15)

Programming Style (5)