**CAB201 Programming Principles**

**Second 10% Assignment Criteria Reference Assessment**

**Grades of 4 or higher assumes that the code contains no logic or run-time errors.**

**Mark: 9.5/10**

|  |  |  |
| --- | --- | --- |
| **Program process multiple sets of scores** | **Maximum Grade Possible** | **Maximum Mark Possible** |
| contains compilation errors | 1 | 2 |
| implemented as straight line code in a method other than Main  or only works correctly for some Games or use System.Array class methods | 4 | 6 |
| Implemented Stage 1 correctly and  has   * Handle any number of Games and any number of draw numbers * Console output is correct * Console output matches screenshots in layout * Class comment * All methods, excluding Main have comments which include a postcondition and those with parameters preconditions using either Block style or XML style comments. * no output statements in Main * Main contains statements which are either method calls, assignment statements and repetition statements | 6 | 8 |
| Implemented Stage 2 correctly and   * Draw numbers are unique and are generated randomly. * All 12 Games have 6 randomly generated numbers which are displayed in ascending order * Output of matches is correct | 7 | 10 |

**The following list is not necessarily complete; some possible matters may have been overlooked**

**COMMENTS:** Stage 1 – Code well commented and structured however make sure you include a Class comment explaining purpose of class with a date (mm/yyyy) and your name. The method comments should appear OUTSIDE of the method and not inside the method (no penalty applied for this). Some of the inline comments in main are unnecessary – only include comments within the method where there is complex code that is not immediately obvious as to its purpose/function.

Stage 2 – Same applies to commenting as in Stage 1. Avoid the use of magic numbers in your code – generatedNumber = randomGen.Next(1, 45); Use a constant to represent these magic numbers. This will only generate random numbers between 1 and 44 (the upper bound is not included) – refer to <https://msdn.microsoft.com/en-us/library/2dx6wyd4(v=vs.110).aspx>

**Marks (or part-marks) will be deducted for**

* **No Class comment**
* **No method comments**
* **Incomplete Method comments**
  + **No precondition when there are parameters**
  + **No post condition**
* **Methods which perform multiple functions**
* **Changes to the given array declarations**
* **Code contains magic numbers or only works for specific size arrays**
* **Use of System.Array class methods in stage 1.**
* **Main calls a method which performs the entire required functionality**
* **Output statements in Main**
* **Stage 2 does not randomly generate**
  + **Draw numbers**
  + **Game numbers**
* **In stage 2**
  + **Draw numbers are sorted**
  + **Draw numbers contain duplicate values**
  + **Game numbers are not sorted**
  + **A single Game contain duplicates**
* **Attempting stage 2 does not guarantee a mark higher than 8.**