# Preliminary Material Code Analysis –

# Noughts and Crosses

### Step 1 – READ THE EXAM BOARD “Instructions to candidates”

Here is my take …..

* Note that the format of the exam is slightly different to the mock paper!
* **Section A** will be **THEORY QUESTIONS.**
* **Print out** the Comp1 Spec and highlight any areas you are not sure about..
* The three areas most likely to be in this section are:
* Problem Solving
* Data representation
* System life Cycle (I think this will be examined in the later sections)
* **Section B**  You write a new program from scratch
* Only 20mins! So it will be a short problem (like my homeworks)
* Will be different to the skeleton program
* Could test your theory knowledge
* Could be a convert from PseudoCode/Structured English
* **Section C** Theory questions based on the skeleton code
* “What line does…..” style questions
* Explain function X questions
* What is the role of variable Y etc……
* **Section D** Altering and extending the skeleton program
* Almost half the paper
* Correcting the subtle mistake
* Possible Additional requirements (almost guaranteed to feature!)

**NB: Element zero of any array should NOT be used for this exam!!!!!!!!**

The rest of this pack is designed to help you analyse the Skeleton Code, you should type OR copy/paste your answers into the table below…You may use any resources. The code does run correctly and can be tested.

*NB: NO line numbers are used in the OFFICIAL skeleton code.
The line numbers used below are only valid for the version of the skeleton code attached to this document*.

**The following questions refer to the MAIN program**

|  |  |
| --- | --- |
| 1. Write down (copy/paste) of the **Identifiers** for variables in the program and their assumed data types.
 |  |
| 1. Write down (copy/paste) all of the **Functions/Subroutines** in the program
 |  |
| 1. Give an example of an identifier for an array.
 |  |
| 1. What is the difference between the **Char** and **String** data types?
 |  |
| 1. What does the line 27 doPlayerOneScore = 0.0

(VB: Line 31 C# : Line 40) |  |
| 1. If PlayerOneSymbol holds a value of “X” . What would be the next assignment statement after line 81?(VB: Line 37 C# : Line 47)
 |  |
| 1. What **“Role”** Does the variable NoOfMoves perform on line 111(VB: Line 71 C# : Line 84)
 |  |
| 1. What **“Role”** Does the variable Answer perform on line 105(Python: 138)
 |  |
| 1. Where else in the code does a variable perform the same “**role”** as in question 8
 |  |
| 1. What is the purpose of the while/Until Loop lines 78🡪82

(VB: Lines 33🡪41 C# : Lines 42🡪52) |  |
| 1. What values could the variable ValidMove store?
 |  |

**The following questions refer to the Procedure: CheckValidMove**

|  |  |
| --- | --- |
| 1. List the parameters declared in the program interface of this procedure
 |  |
| 1. Which parameters are not actually used in this Procedure?
 |  |
| 1. What type of validation check is performed on line 53?(VB: 147

C#: 173) |  |
| 1. Give an example of a value that will pass the validation check
 |  |
| 1. Give an example of a value that will fail the validation check (i.e. is ‘erroneous’)
 |  |
| 1. What does line 121 do?If PlayerOneSymbol = CurrentSymbol Then(VB: 85

C#: 101) |  |