

Year 8 IST – Semester Two Assignment One (40%)

Name:

Item	Total	Mark
Implement the <code>basicComputerPlayer()</code> function (6 marks)		
Provides code which generates a random number between 0 – 2	2	
Correctly calls the <code>displayComputerPlayerSymbol</code> function	2	
Returns the randomly generated number	2	
Finish the <code>checkWinner(humanChoice, computerChoice)</code> function (11 marks)		
Human player wins:		
• Rock (0) beats scissors (2)	1	
• Paper (1) beats rock (0)	1	
• Scissors (2) beats paper (1)	1	
Computer player wins		
• Rock (0) beats scissors (2)	1	
• Paper (1) beats rock (0)	1	
• Scissors (2) beats paper (1)	1	
Returns either “Human” or “Computer” at the appropriate locations.	2	
Uses conditions which do not fall-through (i.e. stops when the first conditional evaluating to <i>true</i> is found) for improved efficiency, such as else-if statements or switch-break statements.	3	
Finish the <code>updateScores(winner)</code> function (8 marks)		
Conditions to check who is the winner, based on the winner parameter	2	
Increments the score global variable for the winner	2	
Gets a reference to the div containing the winner’s score	2	
Updates the div with the new score	2	
Implement the <code>advancedComputerPlayer()</code> function (15 marks)		
Creates additional variables to track whether the computer won the last round, and the computer’s choice for the last round.	2	
Checks whether the computer won the last round	1	
If so:		
• Plays the same choice again (calls <code>displayComputerPlayerSymbol</code> and returns that choice)	4	
If not:		
• Generates a random number between 0 – 2 which does not match choice of the computer from the last round	4	
• Calls the <code>displayComputerPlayerSymbol</code> with the new choice	2	
• Returns the new choice	2	
TOTAL	40	