Programming Challenge - January Assessment preparation

To aid your preparation for the January assessments complete the tasks below.

As before this part is open book and you should make use of your notes as well as your programming tasks (GitHub will be very useful!)

Scenario

You have been asked to create a computer game for Computer Science in Education week (4th - 10th December 2017). This game allows up to four players to compete in a number guessing game.

Once the four team names have been entered the program selects two of the teams and asks them to guess a number between 1 and 10. The team which takes the least number of attempts is declared the winner.

If you have time the client would like you to add functionality to repeatedly select two teams and play the guessing game until the user decides to quit.

Part		Marks
1	Add commentary to your program which includes: - the name of the program - Your full name - Today's date	3
2	Ask the user to enter the names of four teams. Store these team names in a suitable data structure.	4
3	Select two of the teams at random and display these team names on the screen.	3
4	Generate a random number between 1 and 10 and pass this into a subroutine which repeatedly asks the first team to guess the number until they guess correctly. When the team guesses correctly the subroutine should return the number of attempts taken to the calling code.	6
5	Display the number of attempts taken by the first team on the screen.	1
6	Generate another random number between 1 and 10 and pass this into the same subroutine as in step 4. When the team guesses correctly the subroutine should return the number of attempts taken to the calling code.	3
7	Display the number of attempts taken by the second team on the screen.	1
8	Compare the number of attempts taken by both teams and declare which team wins OR if there is a draw.	4
9	Adapt the program above so that it continues to select two teams to play the guessing game until the user quits.	5