6-A-Day – Computer Science GCSE (40)

Q1	Explain why people sometimes use hex numbers to represent numbers stored in computers, even though computers do not use hex numbers. .... **[3]**
Q2	Santos is writing a program that guesses the number of goals a team will score in a football match. The algorithm for his program is shown below: ``` 01 CONST Noise = 10 02 INPUT Wins 03 INPUT Losses 04 Goals = 0 05 Net = Wins - Losses 06 WHILE Net > Noise 07 Goals = Goals + 1 08 Net = Net - Noise 09 END WHILE 10 OUTPUT Goals ``` **(a)** State what is meant by a constant and give an example from the algorithm above. .... **[2]**
Q3	State what is meant by a variable and give an example from the algorithm above. .... **[2]**

Q4	State the number of goals that will be output by this algorithm for the following inputs. Explain how you obtained your answer in each case. Wins = 30 Losses = 25 .... **[2]**
Q5	Wins = 20 Losses = 5 .... **[3]**
Q6	Define the term database. .... **[1]**