2011 Paper 4 Question 6

Databases

(a) Describe NULL values in SQL. [2 marks]

(b) Discuss three problems caused by the introduction of NULL values. [3 marks]

(c) Can schema normalisation decrease the need for NULL values in a database? Justify your answer. [3 marks]

(d) What is a referential integrity constraint and where are such constraints typically enforced? [3 marks]

(e) Discuss how schema normalisation can introduce the need for referential integrity constraints. [3 marks]

(f) Describe the tradeoffs that a database designer needs to consider when deciding whether or not to store data in normalised or de-normalised tables. [6 marks]