



1.3.2 Transaction Processing

1. Transactions with a database should be ACID.

a) Describe what the A in ACID stands for and explain what it means in the context of ACID transactions.

[2 marks]

b) Describe what is meant by a transaction being durable.

[2 marks]

c) Give **one** way that durability can be achieved for a completed transaction.

[1 mark]

2. The I in ACID stands for isolation.

a) Explain what isolation means in the context of ACID transactions.

[1 mark]

b) Explain how record locking can be used to ensure that the ACID principle of isolation is achieved when carrying out multiple transactions.

[3 marks]

c) Give **one** disadvantage of using record locking.

[1 mark]

