

6 A company uses a relational database to store data about its customers, employees and the individual repair jobs that customers have booked.

(a) Explain the benefits of using a relational database instead of a file-based approach.

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(b) The company decides which employees will work on each repair job. An employee can log into the database to access information about their repair jobs.

The database is normalised and includes these tables:

- CUSTOMER stores personal data about each customer
- EMPLOYEE stores personal data about each employee
- LOGIN_DATA stores the username and password for each employee
- JOB stores the data about each repair job
- JOB_EMPLOYEE stores the employees that are working on each repair job.

(i) Identify each relationship between the database tables and explain how each relationship can be implemented in the normalised database.

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(ii) The database also has the table INVOICE that stores data about each invoice that is sent to a customer.

Example data from the table INVOICE is given.

InvoiceID	DateSent	Amount	Paid	JobID
29262	12/12/2023	105.20	Y	221
26765	11/11/2023	200.00	Y	315
13290	02/01/2024	50.00	Y	315
34090	05/02/2024	25.95	N	569

Write a Structured Query Language (SQL) script to return the total amount of all the invoices sent in the year 2023 that have been paid.

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