

Solutions

Each answer shows the steps, then the **result**.

2.1

- `SELECT name FROM Student`
- `WHERE year_group = 12;`

2.2

- `SELECT title FROM Book`
- `WHERE title LIKE 'H%'`
- `ORDER BY title;`

2.3

- **Dune, Holes**

2.4

- `INSERT INTO Book (book_id, title, author)`
- `VALUES (13, 'Wonder', 'Palacio');`

3.1 B

- `WHERE` filters rows before grouping

3.2 B

- no `WHERE`, so every row

3.3 D

- durability

3.4

(a) One answer:

```
SELECT Book.title
FROM Loan
JOIN Student ON Loan.student_id = Student.student_id
JOIN Book ON Loan.book_id = Book.book_id
WHERE Student.name = 'Ana';
```

- selects `Book.title`
- joins `Loan` to `Student` on `student_id`
- joins `Loan` to `Book` on `book_id`
- `WHERE` name is `'Ana'`

(b)

- **Dune, Holes**

(c)

- `DELETE FROM Loan`
- `WHERE book_id = 10; (or loan_id = 100)`

(d)

- `UPDATE Student SET year_group = 12`
- `WHERE student_id = 3;`

(e)

- both the withdrawal and the deposit must happen, or neither
- if the system fails part-way, the transaction is rolled back, so no money is lost or created