Week04 – SQL - QUESTIONS

These questions and queries cover a wide range of scenarios commonly encountered in a MKTIME database, utilising joins, subqueries, and aggregate functions to extract meaningful output from the database.

1. List all products.

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| Code | Expected Answer | Actual Answer |
| SELECT \* FROM books | How many records you expect to display:  10 | 10 rows retrieved |

2. Find the total sales amount for each product.

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| Code | Expected Answer | Actual Answer |
| SELECT order\_details.book\_id, books.book\_name, SUM(order\_details.item\_price) FROM order\_details INNER JOIN books ON books.book\_id = order\_details.book\_id GROUP BY book\_id; | How many records you expect to display:  8 |  |

3. List all users who made purchase on 6th June 2023.

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| Code | Expected Answer | Actual Answer |
| SELECT customer\_order.customer\_id,  customer.first\_name, customer.last\_name,  customer\_order.order\_datetime  FROM customer\_order  INNER JOIN customer ON  customer.customer\_id = customer\_order.customer\_id  WHERE CAST(customer\_order.order\_datetime AS DATE)  = "2024-06-06"; | How many records you expect to display:  5 |  |

4. Find the top 5 costing items.

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| Code | Expected Answer | Actual Answer |
| SELECT book\_name, book\_author, item\_price FROM books ORDER BY item\_price DESC  LIMIT 5; | How many records you expect to display:  5 |  |

5. List all items and who purchased those items.

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| Code | Expected Answer | Actual Answer |
| SELECT DISTINCT books.book\_name, books.book\_author, order\_details.order\_id, customer\_order.customer\_id, customer.first\_name, customer.last\_name FROM books  INNER JOIN order\_details  ON order\_details.book\_id = books.book\_id  INNER JOIN customer\_order  ON order\_details.order\_id = customer\_order.order\_id  INNER JOIN customer  ON customer\_order.customer\_id = customer.customer\_id | How many records you expect to display:  13 |  |

6. Find the total order value for each user.

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| Code | Expected Answer | Actual Answer |
| SELECT SUM(customer\_order.order\_price), customer\_order.customer\_id, customer.first\_name, customer.last\_name FROM customer\_order  INNER JOIN customer ON customer.customer\_id= customer\_order.customer\_id  GROUP BY customer\_order.customer\_id | How many records you expect to display:  2 |  |

7. List all products with their corresponding orders.

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| Code | Expected Answer | Actual Answer |
| SELECT books.book\_id, books.book\_name, order\_details.order\_id  FROM books I  NNER JOIN order\_details  ON books.book\_id = order\_details.book\_id  ORDER BY books.book\_id | How many records you expect to display: |  |

8. Find the customer who spent the most in total.

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| Code | Expected Answer | Actual Answer |
| SELECT a.customer\_id, a.first\_name, MAX(sums) FROM  ( SELECT customer\_order.customer\_id , customer.first\_name, customer.last\_name,SUM(customer\_order.order\_price) as sums  FROM customer\_order  INNER JOIN customer  ON customer.customer\_id = customer\_order.customer\_id  GROUP BY customer\_order.customer\_id ) as a; | How many records you expect to display:  1 |  |

9. Find the top 3 categories with the highest total sales.

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| Code | Expected Answer | Actual Answer |
| SELECT books.book\_id, books.book\_name, books.book\_author, SUM(order\_details.item\_price) as sums  FROM books INNER JOIN order\_details  ON order\_details.book\_id = books.book\_id  GROUP BY books.book\_id  ORDER BY sums DESC  LIMIT 3; | How many records you expect to display:  3 |  |

11. List all orders made by a specific customer (e.g., John Doe).

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| Code | Expected Answer | Actual Answer |
| SELECT customer.first\_name, customer.last\_name, customer\_order.order\_id, customer\_order.order\_price FROM customer\_order INNER JOIN customer ON customer.customer\_id = customer\_order.customer\_id  WHERE customer\_order.customer\_id = 1; | How many records you expect to display:  5 |  |

12. Find the number of orders placed by user\_id = 1.

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| Code | Expected Answer | Actual Answer |
| SELECT customer.first\_name, customer.last\_name, COUNT(customer\_order.order\_id) as orders  FROM customer\_order  INNER JOIN customer  ON customer.customer\_id = customer\_order.customer\_id  WHERE customer\_order.customer\_id = 1; | How many records you expect to display:  1 |  |

13. List all items with their respective quantities sold.

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| Code | Expected Answer | Actual Answer |
| SELECT books.book\_id, books.book\_name, SUM(order\_details.quantity)  FROM books  INNER JOIN order\_details  ON order\_details.book\_id = books.book\_id  GROUP BY books.book\_id; | How many records you expect to display:  1 |  |