**Database exercises**

**1) How many orders were received for products with a category\_id = 2**

SELECT \* FROM `orders` WHERE category\_id = 2;

SELECT COUNT(id) FROM `orders` WHERE category\_id = 2;

**2) How many orders were received with a category\_id of either 2, 4, or 5**

SELECT \* FROM `orders` WHERE category\_id = 2 OR category\_id =4 OR category\_id = 5;

SELECT COUNT(id) FROM `orders` WHERE category\_id = 2 OR category\_id =4 OR category\_id = 5;

**3) How many order are there with a price over £35.00**

SELECT \* FROM `orders` WHERE price > 35.00;

SELECT COUNT(id) FROM `orders` WHERE price > 35.00;

**4) How many orders are there where the customer has a date of birth before 1st January 1980 and want to receive the newsletter**

SELECT \* FROM `orders` WHERE date\_of\_birth <= '1998-01-01' and newsletter = 1;

SELECT COUNT(id) FROM `orders` WHERE date\_of\_birth <= '1998-01-01' and newsletter = 1;

**5) How many customers named Davenport placed orders?**

SELECT \* FROM `orders` WHERE customer\_firstname = 'Davenport' OR customer\_surname = 'Davenport';

SELECT COUNT(id) FROM `orders` WHERE customer\_firstname = 'Davenport' OR customer\_surname = 'Davenport';

**6) Which customer with a firstname starting with 'Br', had the most orders**

SELECT \* FROM `orders` WHERE customer\_firstname LIKE 'Br%';

**7) List all orders with products from category 3 by order of price, highest first**

SELECT \* FROM `orders` WHERE category\_id = 3 ORDER BY price DESC;

**8) Select the following fields from all orders (trans\_date, price, promo\_code) renaming the colum (field) headings ('Transaction Date', 'Price' & 'Promotion Code')**

SELECT trans\_date AS 'Transaction Date', price AS 'Price', promo\_code AS 'Promotion Code' FROM `orders`;

**9) Select the following fields (customer\_surname, customer\_firstname, county) from all orders, with customer names in a single field named 'Customer Name' and in the format <Surname>, <Firstname>, with surname capitalised. The county field is to be renamed 'County'.**

SELECT CONCAT(UPPER(`customer\_surname`),' ', customer\_firstname) AS 'Customer Name', `county` as 'County' FROM `orders`;

**10) Select the average price, minimum price & maximum price for each category.**

SELECT AVG(price),MAX(price), MIN(price), category\_id FROM `orders` GROUP BY category\_id;

**11) Select the category\_name (labelled 'Category', number of sales (labelled 'Total Orders') & total sales (labelled 'Total Sales') for each category.**

SELECT C.category\_name AS 'Category', COUNT(O.id) AS 'Total Orders', SUM(O.price) AS 'Total Sales' FROM categories AS C, orders AS O WHERE C.id = O.category\_id GROUP BY C.id;

**12) List all orders with the following fields (with the labls given) orders.trans\_date('Transaction Date'), categories.category\_name('Category'), orders.customer\_surname('Surname'), orders.customer\_firstname('Firstname'), orders.price('Order Price'), categories.category\_name('Category'), promotions.discount('Discounted by')**

SELECT orders.trans\_date AS 'Transaction Date', categories.category\_name AS 'Category', orders.customer\_surname AS 'Surname', orders.customer\_firstname AS 'Firstname', orders.price AS 'Order Price', categories.category\_name AS 'Category', promotions.discount AS 'Discounted by' FROM categories, orders, promotions;