

Jake Shay

HW3

SQL Code:

1. SELECT city FROM offices ORDER BY city ASC;
2. SELECT employeeNumber, lastName, firstName, extension FROM employees  
INNER JOIN offices ON employees.officeCode = offices.officeCode  
WHERE offices.city = "Paris";
3. SELECT productCode, productName, productVendor, quantityInStock, productLine FROM products WHERE quantityInStock BETWEEN 100 AND 1000;
4. SELECT productCode, productName, productCode, buyPrice, MSRP FROM products ORDER BY MSRP ASC LIMIT 1;
5. SELECT productName, (MSRP - buyPrice) AS profit FROM products ORDER BY profit DESC LIMIT 1;
6. SELECT country, COUNT(customerNumber) AS Customers FROM customers GROUP BY country ORDER BY Customers DESC;
7. SELECT products.productCode, products.productName, COUNT(productName) AS OrderCount FROM products INNER JOIN orderDetails ON products.productCode = orderDetails.productCode GROUP BY productCode ORDER BY OrderCount DESC;
8. SELECT employeeNumber, CONCAT(firstName, ' ', lastName) AS name FROM employees WHERE reportsTo =  
(SELECT employeeNumber FROM employees WHERE firstName = "Diane" AND lastName = "Murphy") OR reportsTo =  
(SELECT employeeNumber FROM employees WHERE firstName = "William" AND lastName = "Patterson");
9. SELECT employeeNumber, lastName, firstName FROM employees WHERE reportsTo IS NULL;
10. SELECT productName FROM products WHERE productLine = "Classic Cars" AND SUBSTRING(productName, 1, 3) = "197";
11. SELECT MONTHNAME(orderDate) AS month, COUNT(\*) AS monthOrders FROM orders INNER JOIN orderDetails ON orders.orderNumber = orderDetails.orderNumber WHERE YEAR(orders.orderDate) = 2005 GROUP BY month ORDER BY monthOrders DESC LIMIT 1;
12. SELECT firstName, lastName FROM employees LEFT JOIN customers ON employees.employeeNumber = customers.salesRepEmployeeNumber WHERE customers.SalesRepEmployeeNumber IS NULL AND employees.jobTitle = "Sales Rep";
13. SELECT customerName FROM customers LEFT JOIN orders ON customers.customerNumber = orders.customerNumber WHERE orders.customerNumber IS NULL AND country = 'Germany';
14. SELECT customers.customerName, SUM(orderDetails.quantityOrdered) AS total FROM customers  
INNER JOIN orders ON customers.customerNumber = orders.customerNumber  
INNER JOIN orderDetails ON orders.orderNumber = orderDetails.orderNumber  
GROUP BY customerName HAVING total > 1700;
15. CREATE TABLE TopCustomers (

```

        CustomerNumber int NOT NULL,
        ContractDate date NOT NULL,
        OrderTotal decimal(9,2) NOT NULL,
        CONSTRAINT TopCustomer_PK PRIMARY KEY (CustomerNumber));
16. INSERT INTO TopCustomers (CustomerNumber, ContractDate, OrderTotal)
    SELECT customers.customerNumber, CURDATE(), SUM(orderDetails.quantityOrdered
* orderDetails.priceEach) AS OrderTotal FROM customers
    INNER JOIN orders ON customers.customerNumber = orders.customerNumber
    INNER JOIN orderDetails ON orders.orderNumber = orderDetails.orderNumber
    GROUP BY customerNumber HAVING OrderTotal > 140000;
17. SELECT * FROM TopCustomers ORDER BY OrderTotal DESC;
18. ALTER TABLE TopCustomers ADD COLUMN OrderCount int AFTER OrderTotal;
19. UPDATE TopCustomers SET OrderCount = FLOOR(RAND()*(18-0+1)) WHERE
OrderCount IS NULL;
20. SELECT * FROM TopCustomers ORDER BY OrderCount DESC;
21. DROP TABLE TopCustomers;

```

Answers:

1.

```

+-----+
| city   |
+-----+
| Boston |
| London |
| NYC    |
| Paris  |
| San Francisco |
| Sydney |
| Tokyo  |
+-----+

```

2.

```

+-----+ +-----+ +-----+ +-----+
| employeeNumber | lastName | firstName | extension |
+-----+ +-----+ +-----+ +-----+
| 1102           | Bondur   | Gerard    | x5408      |
| 1337           | Bondur   | Loui       | x6493      |
| 1370           | Hernandez | Gerard     | x2028      |
| 1401           | Castillo | Pamela     | x2759      |
| 1702           | Gerard   | Martin     | x2312      |
+-----+ +-----+ +-----+ +-----+

```

3.

```

+-----+ +-----+ +-----+ +-----+ +-----+
| productCode    | productName | productVendor | quantityInStock | productLine |

```

S18_2248	1911 Ford Town Car   Motor City Art Classics   540	Vintage Cars
S18_2581	P-51-D Mustang   Gearbox Collectibles   992	Planes
S18_2795	1928 Mercedes-Benz SSK   Gearbox Collectibles   548	Vintage Cars
S32_1374	1997 BMW F650 ST   Exoto Designs   178	Motorcycles
S32_3522	1996 Peterbilt 379 Stake Bed with Outrigger   Red Start Diecast   814	Trucks and Buses
S32_4289	1928 Ford Phaeton Deluxe   Highway 66 Mini Classics   136	Vintage Cars
S50_4713	2002 Yamaha YZR M1   Autoart Studio Design   600	Motorcycles
S700_1938	The Mayflower   Studio M Art Models   737	Ships
S700_3167	F/A 18 Hornet 1/72   Motor City Art Classics   551	Planes
S72_3212	Pont Yacht   Unimax Art Galleries   414	Ships
NULL	NULL   NULL   NULL   NULL	

4.

productCode	productName	productCode	buyPrice	MSRP
S24_1937	1939 Chevrolet Deluxe Coupe   S24_1937	22.57	33.19	
NULL	NULL   NULL   NULL   NULL			

5.

productName	profit
1952 Alpine Renault 1300   115.72	

6.

country	Customers
USA	36
Germany	13
France	12

7.

productCode	productName	OrderCount
-------------	-------------	------------

S18_3232	1992 Ferrari 360 Spider red	53	
+ -----	+ -----	+ -----	+

8.

+ -----	+ -----	+
employeeNumber	name	
+ -----	+ -----	+
1056	Mary Patterson	
1076	Jeff Firrelli	
1611	Andy Fixter	
1612	Peter Marsh	
1619	Tom King	
+ -----	+ -----	+

9.

+ -----	+ -----	+ -----	+
employeeNumber	lastName	firstName	
+ -----	+ -----	+ -----	+
1002	Murphy	Diane	
NULL	NULL	NULL	
+ -----	+ -----	+ -----	+

10.

+ -----	+
productName	
+ -----	+
1972 Alfa Romeo GTA	
1970 Plymouth Hemi Cuda	
1976 Ford Gran Torino	
1970 Triumph Spitfire	
1970 Chevy Chevelle SS 454	
1970 Dodge Coronet	
1971 Alpine Renault 1600s	
+ -----	+

11.

+ -----	+ -----	+
month	monthOrders	
+ -----	+ -----	+
May	129	
+ -----	+ -----	+

12.

+ -----	+ -----	+
firstName	lastName	
+ -----	+ -----	+
Tom	King	
Yoshimi	Kato	

+ ----- + ----- +

13.

+ ----- +

| customerName |

+ ----- +

| Natürlich Autos |

| Messner Shopping Network |

| Franken Gifts, Co |

| Der Hund Imports |

| Cramer Spezialitäten, Ltd |

| Kommission Auto |

| Stuttgart Collectable Exchange |

| Feuer Online Stores, Inc |

| Warburg Exchange |

| Mit Vergnügen & Co. |

+ ----- +

14.

+ ----- + ----- +

| customerName | total |

+ ----- + ----- +

| Australian Collectors, Co. | 1926 |

| La Rochelle Gifts | 1832 |

| Mini Gifts Distributors Ltd. | 6366 |

| Euro+ Shopping Channel | 9327 |

| Muscle Machine Inc | 1775 |

| AV Stores, Co. | 1778 |

+ ----- + ----- +

17.

+ ----- + ----- + ----- +

| CustomerNumber | ContractDate | OrderTotal |

+ ----- + ----- + ----- +

| 141 | 2019-10-10 | 820689.54 |

| 124 | 2019-10-10 | 591827.34 |

| 114 | 2019-10-10 | 180585.07 |

| 151 | 2019-10-10 | 177913.95 |

| 119 | 2019-10-10 | 158573.12 |

| 148 | 2019-10-10 | 156251.03 |

| 323 | 2019-10-10 | 154622.08 |

| 131 | 2019-10-10 | 149085.15 |

| 187 | 2019-10-10 | 148410.09 |

| 450 | 2019-10-10 | 143536.27 |

| NULL | NULL | NULL |

+ ----- + ----- + ----- +

20.

+ ----- + ----- + ----- + ----- +				
CustomerNumber	ContractDate	OrderTotal	OrderCount	
+ ----- + ----- + ----- + ----- +				
141	2019-10-10	820689.54	15	
450	2019-10-10	143536.27	12	
151	2019-10-10	177913.95	10	
124	2019-10-10	591827.34	9	
323	2019-10-10	154622.08	8	
131	2019-10-10	149085.15	5	
187	2019-10-10	148410.09	4	
148	2019-10-10	156251.03	3	
119	2019-10-10	158573.12	2	
114	2019-10-10	180585.07	0	
NULL	NULL	NULL	NULL	
+ ----- + ----- + ----- + ----- +				