STAT_624_HW-03_Kaushik Manikonda

1. Display all the data in the **Customers** table.

SELECT * FROM Customers; /* Answer to #1 */

2. Display the **CustomerName** and **Country** data columns:

SELECT CustomerName, Country FROM Customers /* #2 Answer */;

3. Display the **CustomerID, CustomerName** data columns, but limit the selection to 10 records.

SELECT CustomerID, CustomerName FROM Customers LIMIT 10 /* #3 Answer */;

4. Display only records where the **Country** is from the USA (13 records).

SELECT * FROM Customers WHERE Country ='USA' /* #4 Answer */;

5. Display only records where the **Country** is from the USA, Germany, UK and France using the SQL

IN key word (42 records):

SELECT * FROM Customers WHERE Country IN ('USA', 'Germany', 'UK', 'France') /* #5 Answer */;

6. Display only records from the **OrderDetails** table when the **ProductID** is greater or equal to 50

(222 records):

SELECT * FROM OrderDetails WHERE ProductID >=50 /* #6 Answer */;

7. Display only records from the **OrderDetails** table when the **ProductID** is between 50 and 60

(inclusive) (91 records):

SELECT * FROM OrderDetails WHERE ProductID >=50 AND ProductID<=60 /* #7 Answer */;

8. Display only records where the **ContactName** starts with a capital "L" (5 records):

SELECT * FROM Customers WHERE ContactName LIKE 'L%' /* #8 Answer */;

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9. Display all records where the **City** is NULL (0 records);

SELECT * FROM Customers WHERE City IS NULL /* #9 Answer */;

10. Display all records and order them by **City** (alphabetically) (solution check: first record is **CustomerID**=17, last record is 83).

SELECT * FROM Customers ORDER BY City /* #10 Answer */;

11. Display all records and order them by **Country** in descending order and then **City** in ascending order. The solution will have the first record is **CustomerID**=46, last record is 64);

SELECT * FROM Customers ORDER BY Country DESC, City /* #11 Answer */;

12. From the **OrderDetails** table, display the **ProductID** and average **Quantity** of that product ordered. Label the average Quantity as "Average Quantity" (77 records):

SELECT ProductID, AVG(Quantity) AS 'Average Quantity' FROM OrderDetails GROUP BY ProductID /* #12 Answer */;

13. For question #12, sort the results by average quantity (descending order). The solution will have

largest average quantity of 70:

SELECT ProductID, AVG(Quantity) AS 'Average Quantity' FROM OrderDetails GROUP BY ProductID ORDER BY AVG(Quantity) DESC /* #13 Answer */;

14. For Question #13, only display the records where the average quantity is larger than 50. Solution

will display three records.

SELECT ProductID, AVG(Quantity) AS 'Average Quantity' FROM OrderDetails GROUP BY ProductID HAVING AVG(Quantity)>50 ORDER BY AVG(Quantity) DESC /* #14 Answer */;

15. Display every **CustomerName** with **OrderID** and **OrderDate** (display 3 columns) sorted by **CustomerName**. You will need to JOIN two tables together to do this. The first record of the

solution will be: *"Ana Trujillo Emparedados y helados, 10308, 1996-09-18"*.

SELECT c.CustomerName, o.OrderID, o.OrderDate FROM Customers AS c INNER JOIN Orders AS o ON c.CustomerID=o.CustomerID ORDER BY c.CustomerName /* #15 Answer */;

16. Insert the following record into the Customers tables (**CustomerID** is 92, **CustomerName** is 'James

Charles Putnam', **ContactName** is 'James Putnam', **Address** is 'University Drive 701', City is

'College Station', **PostalCode** is '77845' and **Country** is 'USA')

INSERT INTO Customers VALUES (92, 'James Charles Putnam', 'James Putnam', 'University Drive 701', 'College Station', '77845','USA') /* #16 Answer */;

17. Using the SQL UPDATE command, update **CustomerID** record 92 (created in step #16 above) and

change **CustomerName** to 'Putname Inc.'.

UPDATE Customers SET CustomerName ='Putname Inc.' WHERE CustomerID= 92 /* #17 Answer */;

18. Delete the CustomerID=77 record from the Customers table.

DELETE FROM Customers WHERE CustomerID =77 /* #18 Answer */;

19. Create a table called Vendors that contains four columns: **VendorID** (integer), **VendorDate** (a

date), **VendorName** (string up to 100 characters), **VendorAddress** (string up to 200 characters).

Make sure that the **VendorID** cannot be NULL.

```
CREATE TABLE Vendors
        (VendorID INT NOT NULL,
         VendorDate DATE,
         VendorName VARCHAR(100),
         VendorAddress VARCHAR(200)
    )  /* #19 Answer */;
```

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20. Create an index **ProductID_IDX** on the **ProductID** column of the **OrderDetails** table.

CREATE INDEX ProductID_IDX ON OrderDetails (ProductID) /* #20 Answer */;