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| **Department of Computer Information Systems** A picture containing clipart  Description automatically generated  **John A. Walker College of Business**  **Appalachian State University** |

**CIS 3750 Sections 101, 102 & 103**

**Database Management**

**Assignment #7 – Single Table Query**

## Single Table Query Assignment

Use SQL and the KimTay Pet Supplies database to run query on SSMS.

Make sure you use the database with your Last Name-First & Middle Name Initial.

A purple table with numbers and letters

Description automatically generated

A purple and white table with black text

Description automatically generated

A table with text on it

Description automatically generatedA purple and white invoices

Description automatically generatedA purple table with numbers and letters

Description automatically generated

Make sure you put SQL syntax code below each task inquiry:

**1/ Find the ID, first name, and last name of each customer whose first name begins with the letter “S.”**

SELECT CUST\_ID, FIRST\_NAME, LAST\_NAME

FROM CUSTOMER

WHERE FIRST\_NAME LIKE 'S%';

**2/ List all details about all items. Order the output by description.**

SELECT \*

FROM ITEM

ORDER BY DESCRIPTION;

**3/ List all details about all items. Order the output by item ID within location. (That is, order the output by location and then by item ID.)**

SELECT \*

FROM ITEM

ORDER BY LOCATION, ITEM\_ID;

**4/ How many customers have balances that are more than their credit limits?**

SELECT COUNT(\*)

FROM CUSTOMER

WHERE BALANCE > CREDIT\_LIMIT

SELECT \* FROM CUSTOMER WHERE BALANCE > CREDIT\_LIMIT

**5/ Find the total of the balances for all customers represented by sales rep 10 with balances that are less than their credit limits.**

SELECT SUM(BALANCE)

FROM CUSTOMER

WHERE REP\_ID = '10' AND BALANCE < CREDIT\_LIMIT;

SELECT REP\_ID, FIRST\_NAME, LAST\_NAME, BALANCE

FROM CUSTOMER

WHERE BALANCE < CREDIT\_LIMIT AND REP\_ID = '10';

**6/ List the item ID, description, and on-hand value of each item whose number of units on hand is more than the average number of units on hand for all items. (Hint: Use a subquery.)**

SELECT ITEM\_ID, DESCRIPTION, (ON\_HAND \* PRICE) AS ON\_HAND\_VALUE

FROM ITEM

WHERE ON\_HAND > (SELECT AVG(ON\_HAND) FROM ITEM);

**7/ What is the price of the least expensive item in the database?**

SELECT MIN(PRICE)

FROM ITEM;

SELECT ITEM\_ID, DESCRIPTION, PRICE FROM ITEM ORDER BY PRICE;

**8/ What is the item ID, description, and price of the least expensive item in the database? (Hint: Use a subquery.)**

SELECT ITEM\_ID, DESCRIPTION, PRICE

FROM ITEM

WHERE PRICE = (SELECT MIN(PRICE) FROM ITEM);

**9/ List the sum of the balances of all customers for each sales rep. Order and group the results by sales rep ID.**

SELECT REP\_ID, SUM(BALANCE) AS BALANCE

FROM CUSTOMER

GROUP BY REP\_ID

ORDER BY REP\_ID;

**10/ List the sum of the balances of all customers for each sales rep but restrict the output to those sales reps for which the sum is more than $150. Order the results by sales rep ID.**

SELECT REP\_ID, SUM(BALANCE) AS BALANCE

FROM CUSTOMER

GROUP BY REP\_ID

HAVING SUM(BALANCE) > 150

ORDER BY REP\_ID;

**11/ List the item ID of any item with an unknown description. [1 bonus point - try yourself]**

SELECT ITEM\_ID

FROM ITEM

WHERE DESCRIPTION = ' ';

**12/ List the item ID and description of all items that are in the DOG or CAT category and contain the word “Small” in the description. [1 bonus point - try yourself]**

SELECT ITEM\_ID, DESCRIPTION, CATEGORY

FROM ITEM

WHERE CATEGORY IN ('DOG', 'CAT') AND DESCRIPTION LIKE '%Small%';

***What to turn in***

After you complete this assignment, please use the Word doc included in this assignment, put SQL syntax code answer for each task and turn in:

1. A SQL script file (.sql) containing all the necessary SQL commands solving required tasks
2. A properly prepared & named Word Doc (\*.docx).

Rename the Word doc as your **LastName-FirstNameinitial.docx**

Make sure you name your file as “**LastName\_FirstNaminitial –SSMS Assignment 7**” and upload on AsUlearn to earn ***40 points.***