ERIC MAYBERRY

COP 3710 –DATABASE MANAGEMENT SYSTEMS

LAB #1 - SQL EXERCISE

DUE DATES:

1.) Submit HARD COPY (This Handout) by: **2/21/13 (Thursday in Class)** **Make a copy for yourself**
2.) SUMBIT SPOOL FILE on Blackboard by: **2/21/13 (Thursday by 10:00 a.m.)**

Write the **SQL STATEMENT** for each query on the right and the **OUTPUT** below each query.

	OUTPUT	**SQL STATEMENT**
1.	The name, salary and commission of those employees who have commissions. *(Display salaries in decreasing order.)* **OUTPUT:** ENAME SAL COMM ALLEN 1600 300 MARTIN 1250 1400 WARD 1250 500	SQL> SELECT ENAME, SAL, COMM 2 FROM EMP 3 WHERE COMM > 0 4 ORDER BY SAL DESC;
2.	The name and age of the Accounting majors. *(Display the names in alphabetic order.)* **OUTPUT:** NAME AGE BAKER 41 PARKS 19 RYE 18	SQL > SELECT NAME, AGE 2 FROM STUDENT 3 WHERE MAJOR = 'ACCOUNTING' 4 ORDER BY NAME ASC;
3.	The student number, grade level and age of those students who have an S at the end of their name, are not accounting majors, and younger than 40 years old. **OUTPUT:** SID GR AGE 100 GR 21 460 SN 24	SQL > SELECT SID, GRADE_LEVEL, AGE 2 FROM STUDENT 3 WHERE NAME LIKE '%S' 4 AND MAJOR <> 'ACCOUNTING' 5 AND AGE < 41;
4.	The major and the number of students in each major. **OUTPUT:** MAJOR AMTINMAJOR HISTORY 3 MATH 2 ACCOUNTING 3	SQL> SELECT MAJOR, COUNT(MAJOR) AS AMTINMAJOR 2 FROM STUDENT 3 GROUP BY MAJOR;
5.	The major and the number of students in each major where there are exactly 3 students in that major. *(Display majors in alphabetic order.)* **OUTPUT:** MAJOR AMTINMAJOR ACCOUNTING 3 HISTORY 3	SQL > SELECT MAJOR, COUNT(MAJOR) AS AMTINMAJOR 2 FROM STUDENT 3 GROUP BY MAJOR 4 HAVING COUNT(MAJOR) = '3' 5 ORDER BY MAJOR;

	OUTPUT	**SQL STATEMENT**
6.	Job title, number of each job title and average salary times 12 for those employees with jobs where there are more than 2 employees. *(Display alphabetically by job.)* **OUTPUT:**	
7.	The job and salary of the employee making the least in each job. **OUTPUT:** JOB LOWEST SALARY MANAGER 2450 ANALYST 3000 PRESIDENT 5000 SALESMAN 1250 CLERK 800	SQL > SELECT JOB, MIN(SAL) as "LOWEST SALARY" 2 FROM EMP 3 GROUP BY JOB;
8.	The manager and the number of employees each manager supervises. *(Refer to mgr attribute.)* **OUTPUT:**	
9.	Student number and the number of classes each student is enrolled in for those students taking more than two courses. **OUTPUT:** STUDENT_NUMBER NUMBER OF CLASSES 400 3	SQL > SELECT STUDENT_NUMBER, COUNT (STUDENT_NUMBER) AS "NUMBER OF CLASSES" 2 FROM ENROLLMENT 3 HAVING (COUNT(STUDENT_NUMBER)) >2 4 GROUP BY STUDENT_NUMBER;
10.	The major and the number of students in each major where there are exactly 3 students in that major. *(Display majors in alphabetic order.)* **OUTPUT:** MAJOR STUDENTS IN MAJOR ACCOUNTING 3 HISTORY 3	SQL > SELECT MAJOR, COUNT(MAJOR) AS "STUDENTS IN MAJOR" 2 FROM STUDENT 3 GROUP BY MAJOR 4 HAVING COUNT(MAJOR) = '3' 5 ORDER BY MAJOR;

11.	The total amount of salary earned by all employees. **OUTPUT:** TOTAL SALARY 29025	SQL > SELECT SUM(SAL) AS "TOTAL SALARY" 2 FROM EMP;
12.	The student number and the names of students who have a major that contains a 'Y' excluding the student named Jones. **OUTPUT:** SID NAME 250 GLASS	SQL > SELECT SID, NAME 2 FROM STUDENT 3 WHERE MAJOR LIKE '%Y%' 4 AND NAME != 'JONES';