

CST363 Quiz 1 Name _____ Christopher Holmes _____

Directions: edit this file to include your response and then upload and submit the completed file in DOCX or PDF format to iLearn.

1. Databases and spreadsheets both store data.
 - a. Describe briefly the advantages of databases over spreadsheets?
 - Databases have many advantages over an excel file. The biggest advantage is that a database allows you to store data three dimensionally, where an excel file only allows for you to store data two dimensionally. Databases also have the ability to allow for data to come from multiple sources. In the long run, databases are more cost effective with large amounts of data. The efficiencies of a database make them much more appealing for large amounts of data.
 - b. When would it be advisable to use a spreadsheet instead of a database?
 - Spreadsheets would be more advisable for simple tasks; tracking a list of data, create charts and graphs of data, and to crunch some numbers.

2. A simple SQL select statement consists of a SELECT clause, FROM clause, WHERE clause and an ORDER BY clause.
 - a. Which clauses are required and which are optional?
 - SELECT is the only required clause. FROM, WHERE, and ORDER BY are all optional.
 - b. Give an example to support your answer.
 - select "test" as foo;

Using MySQL Workbench, create a new schema names "art". Download the sql script "Art Course Tables.sql" and execute this script to create the tables Customer, Course, Enrollment. The Art Course database is described on pages 9 and 10 of chapter 1. Use the Art Course database tables to answers questions 3 and 4.

3. Write a SELECT statement that retrieves course number and course name and date for all courses with a with a name contains the letters "oil"

```
select CourseNumber, Course, CourseDate
from COURSE
where Course like '%Oil%';
```

4. Find all occurrences of Advanced Pastels course (course number and date) that start on or after Oct 1 2015.

```
select CourseNumber, CourseDate
from COURSE
where CourseDate >= 2015-10-01 and Course = 'Adv Pastels';
```

5. Find all students that are enrolled in any course with “pastel” in its name. Show the student last and first name and do NOT show any duplicates.

```
select CustomerLastName, CustomerFirstName
from CUSTOMER
where CustomerNumber in (
select CustomerNumber
from COURSE c join ENROLLMENT e
on c.CourseNumber = e.CourseNumber
where Course like '%pastel%');
```