This assignment has two parts:

1. Hands-on lab
2. Course project

**Part I—Hands-on Lab**

For this assignment, you will display information from a Microsoft Access database by using SQL commands.

Using the Microsoft Access database [Teresa'sTrees](http://vizedhtmlcontent.next.ecollege.com/pub/content/bf4603b3-7c44-47fb-bfcd-2e9641eaef20/TeresasTrees.zip" \t "_blank), write SQL statements for the given tasks. Once complete, copy the SQL statements from Microsoft Access and paste them in a Microsoft Word document that will be submitted along with part II of the assignment.

Write an SQL statement:

* To display all the information from the Customer table
* To display each shipping date for customer 1 from the Invoice table

**Note**: Display both the customer number and the shipping date.

* To display the names of all the trees that cost at least $200.00
* To display all the information for invoice number 2
* To list the phone and last name of all customers
* To list the phone, first name, and last name of all customers whose last name starts with "J"
* To return the number of customers
* To determine the average total invoice amount
* To show all the items ordered from invoice number 3
* To show the first and last names along with the invoice number of all customers with an invoice of at least $250.00

**Part II—Course Project**

This part of the assignment is a detailed project designed to help you learn the modeling of business requirements and understand the physical implementation of logical business models through the use of E-R models.

Through each week's project, you will be adding to the course project. You will be assigned tasks each week, which you will complete and submit as directed.

**Course Project Part 1—Database Planning**

For this week, imagine that you have been hired by a company to build a database for it and complete the following tasks:

* Describe your idea of the database.
  + This can be a business problem or a hobby you are interested in—for example, an airline reservation system.
* Outline the database you would like to create.
* Outline the SDLC. Include the following subcategories:
  + Strategy and analysis for a business or an idea you plan to develop
  + Analysis of the current system:
    - What does the company have?
    - What business projections does it have?
  + Integration with other systems—plan how the current system can be integrated with other systems
  + Documentation and communication—describe how this vital part will be accomplished
  + Design for changes—prepare a plan for the future
  + Reusable resources—do not redo work; identify what the company has in place that you can use

(This is the best part of the project—you create everything!)

**Note**: Whatever you create is fiction and the above-mentioned six items will need to be addressed in the final document.

**Assignment Deliverable**

After you complete the lab and course project, collate the information from both in a 3- to 4-page report in a Microsoft Word document.