Microsoft Access 2000
Queries, Views, and Field Properties

**Queries** are questions that the user asks the database. The results of a query could generate a new table of answers, make changes to an existing table, or delete data from an existing table. To avoid deleting or changing data unnecessarily, make sure you know which query you want to use:

**Select Query:** shows answer to a query in the form of a new table so it will not change your existing tables; it is the most common query type

**Update Query:** makes updates (changes) in an existing table

**Delete Query:** deletes data from records in an existing table

There are other queries that are less common and/or more complicated than these three. Some of them may be covered in the future.

**Views** are ways to view database objects, such as tables, forms, queries, and reports. A view can be changed with the **view button**, which will be the leftmost button on the toolbar. This button will appear differently depending upon the view you are currently using:

**Design View:** is used to set up fields and field properties only; it cannot be used to work with actual records

**Datasheet View:** views records in table format; it can be used to add, delete, and update records as well as resize table columns

**Form View:** can be used to view records one at a time in a form; it can be used to add, delete, and update records
Field Properties for a table can be set in the table’s design view. The properties for a selected field will appear in the field properties pane (the lower half) of the design view window. These properties limit how data is entered into the tables and/or how data appears once it is entered:

Field Size: limits the number of characters that can be entered into the selected field (Remember than any of the following keystrokes—a letter, a number, a symbol, a punctuation mark, or the spacebar—will count as a character.)

Format: specifies how the data will appear, such as with uppercase or lowercase letters (Format is also called a format mask because it changes how the data looks)

Default Value: sets the value that appears in the field automatically when a new record is created (Instead of leaving the field empty, the default value will appear until the user enters a value.)

Validation Rule: limits the user to a range of legal values that can be entered into a field (For example, if the rule is set to $>0$, a negative number cannot be entered.)

Validation Text: creates an error message to be displayed if the user breaks the validation rule (A good error message will tell the user what he or she did wrong and/or how to fix it. For example, “The number you entered must be positive.”)

Required: determines whether or not the field may be left blank (Yes means that the user must enter something into the field. No means the field can be null—left blank.)
Questions on Queries, Views, and Field Properties…

1. Which kind of query would you use to give every technician in the Bavant Marine Services database a two-dollar-per-hour pay raise?

2. Which query would you use to remove all marinas in Burton from your database?

3. Which kind of query would you use to create a list of all of the marina names and addresses that technician 49 services?

4. In which view can you resize a data table’s columns? (Hint: It is the view that shows the records arranged in a table.)

5. Which two views allow you to insert, remove, or change a table’s records?

6. Which view will show you only one record at a time?

7. Which view displays the field properties pane?

8. How do you know which field’s properties are shown in the field properties pane?
9. Which key is used to navigate between the upper and lower panes of the design view window?

10. Which of the following keystrokes do not count as characters: K, I, Shift, @, Backspace, ~, #, $, and 8?

11. What does it mean if a field is null?

12. Which field property will not allow a null field if it is set to Yes?

13. To set an automatic value into a field until the user changes it, would you use the Default Value or the Required property?

14. Which property would you use if you wanted a technician’s name to be in all capital letters no matter how the user entered it?

15. If the validation rule is set to =Male OR =Female and the user enters Unknown, what field property will determine the error message that he or she receives?