DATABASE CONNECTIVITY

* TO work with a database on a remote server, you need to connect using a database connectivity method, such as Open Database Connectivity (ODBC)

* Microsoft windows servers use ODBC for database connectivity. You must provide permissions to the database so that you can read from and write to a database

* Common Gateway Interfaces (CGI) is an interface that connects a web server with other software and databases. Sometimes, CGI scripts fail to execute because the web server does not have the necessary permissions to execute files and scripts

* To Execute CGI scripts, you must ensure that the web server you are using has all the necessary permissions. you should assign permissions for the file so that the web server can function properly
However, you should assign only the required permissions.
Otherwise, you may cause security problems by granting excessive permissions

* If you are using an ISP to work with a web-based application, you need to request CGI services. You need to request an ISP to support such actions, such as to enable execute permissions on your scripts, create a directory that contains available CGI scripts, and provide un/pws with appropriate permissions for the system

* After your files are received, the ISP can enable the execute permissions for your scripts. You need ~~the~~ to ask the ISP to create a directory that will be used ~~allow~~ for your CGI scripts.
The ISP creates a CGI bin directory called 'cgi' or 'cgi-bin', and stores your website files in this directory.

* You should request the ISP to provide a un/pw with appropriate permissions for the system. The default administrative account name is 'Root' for unix and 'administrator' for windows.
However, an ISP can provide an alternative user a/c and PW with permissions needed to perform a task customarily reserved for the 'Root' or administrator a/c

* The three basic elements of an application are listed ~~on the screen~~
  i) DATA
  ii) Logic
  iii) Presentation

* In a single tier database, the data, business logic, and presentation elements are provided by a single application, such as MS ACCESS. In this database system, you can store values, write SQL code to present the logic and manipulate data, and display the information using forms.

* In a Two tier application, a client handles the data presentation and business logic, and a server stores the database.
You need to establish connectivity between the client and the server, to display or manipulate the data.
In this tier, a change to the database may require a client upgrade.
For example, a client using Access, which has logic to display the data and data presentation, queries a remote database server for database values.

* In a n-tier computing model, the data, logic and presentation layers are on different computers.
In this type of application, a layer can be upgraded without affecting other layers and the connectivity between layers.

* For example, on a n-tier application, a web browser displays presentation information, a web server contains logic and the scripting code to display the information, and a database server stores the data.
The web browser connects to and downloads forms from the website on a web server that is connected to a remote database server.