Chapter 10 Hands-on Activities

1. Knowledge management (KM) systems use databases to capture individual knowledge, filter and identify the most relevant knowledge, and allow employees to access knowledge based on needs that have been previously specified.

   Supplying managers with too much information can lead to information overload. Managers cannot effectively review all the information, identify problems and come up with solutions. To avoid this situation, managers can mine data and find information to help them solve problems. For example, a plant manager who needs to track output levels might search a database or a data warehouse to uncover the reasons why the plant was unable to meet the minimum output level during specific shifts.

   Create a database program using Microsoft Access that produces reports when the output is below the minimum level. Create a table named ShiftReport that will contain the date, the shift, name of foreperson, reported problem and product output level and will use the following table structure.

Field Name	Field Type	Primary Key
ShiftReportID	AutoNumber	Yes
Date	Date/Time	
Shift	Text	
Foreperson	Text	
Problem	Memo	
OutputLevel	Number	

   Enter the following data in the ShiftReport table.

ShiftReportID	Date	Shift	Foreperson	Problem	OutputLevel
1	10/11/07	1	Ingles		893
2	10/11/07	2	Gordon	Power outage.	807
3	10/11/07	3	Johnson	Power outage.	154
4	11/11/07	1	Ingles		954
5	11/11/07	2	Jackson		942
6	11/11/07	3	Johnson		959

   Save the program as **ch10actsol1.mdb**.

   The minimum output level is 800 units. You will need to query that table to identify all records that are below this level.

Using Create query in Design view, add the ShiftReport table to the query. Then close the Show Table window. Drag Output Level to the Field. In the Criteria row, type in <800. Drag the Date, Shift, Foreperson and Problem to columns, so that they are displayed. Save the query as FindProblem.

Use the report wizard to create a report. Sort the results of FindProblem by date. Save the report as Problems.

2. Through data mining, people explore and find relationships between data that help them make decisions. Certain software programs mine information available on the Web for information. Shopping programs, such as Yahoo! Shopping, allow users to search for products offered by hundreds, thousands, or even tens of thousands of online stores. Some programs have rating information about the products or the merchants offering the product as well as pricing information. Visit Shopping.yahoo.co.uk and search for information about a product that you are interested in purchasing, such as a food processor or a printer. Find at least three examples of the product. Then create a table in Microsoft Word that records the product name, the price, and the rating. Save the program as **ch10actsol2.doc**.