

Principles of Business Information Systems

Hands-on activities – Chapter 5

1. Manipulating Data and Generating Reports

A database manipulation language is used to manipulate the database. It allows managers and other database users to access, modify, and make queries about data contained in the database to generate reports. SQL is an integral part of relational databases. SQL uses standardized and simplified procedures for retrieving, storing, and manipulating data in a database system.

Create a database application using Microsoft Access or similar to keep track of the items sold at a store. Create a table named Items that will contain the Item ID, Item Name, Item Type, Item Price and Store Location. Use the following table structure:

Field	Field Type	Primary key?
ItemID	Text	Yes
ItemName	Text	
ItemType	Text	
ItemPrice	Number (2 decimals)	
StoreLocation	Text	

Enter the data from the following table into the Ch5Items table.

ItemID	ItemName	ItemType	ItemPrice	StoreLocation
01	Shirt	Brown	12.50	Shirlington
02	Jeans	Blue	30.00	Dumfries
03	Shirt	Black	12.90	Springfield
04	Jeans	Red	25.00	Shirlington
05	Shoes	Black	15.90	Springfield

06	Shoes	Brown	34.00	Dumfries
07	Jacket	Orange	5.90	Dumfries
08	Shirt	Green	10.00	Charlotte
09	Jeans	Silver	15.90	Dumfries
10	Shirt	Brown	34.89	Shirlington
11	Jacket	Blue	23.00	Charlotte
12	Jeans	White	12.90	Springfield
13	Jacket	Black	50.90	Dumfries
14	Jeans	Green	65.00	Springfield

In a report, sort the records in ascending order based on the Item Name. Use 'Store Database' as the report title. Save the report

Perform the following queries using query by example:

1. Display the Item ID, Item Name, Store Location and Item Price for all items from the Springfield store. Save the query as 'SpringfieldStore'.
2. Display the Item ID, Item Name, and Item Price for all items that cost more than €50. Sort the records in ascending order based on the Item Name. Save the query as 'ItemSort'.
3. Display the Item ID, Item Name and Store Location for all items from the Dumfries store. Save the file as 'DumfriesStore'.
4. Display the Item Name and Item Type for all items that are black. Save the query as 'BlackItems'.
5. Display the Item Name and Item Price for all items that cost less than €60. Save the query as 'SixtyLess'.

You can view the SQL statement(s) created by Microsoft Access for each query - while viewing the Query Grid, Click on View on the menu, Click on SQL View.