

Henry Books Case

Ray Henry knows that being able to run queries is one of the most important benefits of using a DBMS. Now that he has created his database, he is eager to obtain answers to a variety of questions. In the following exercises, you will use the data in the Henry Books database shown in Figures 1-15 through 1-18 in Chapter 1. (If you use a computer to complete these exercises, use a copy of the Henry Books database so you will still have the original data when you complete Chapter 3.) In each step, use QBE to obtain the desired results. You can use the query feature in a DBMS to complete the exercises using a computer, or you can simply write a description of how you would complete the task. Check with your instructor if you are uncertain about which approach to take.

1. List the name of each publisher that's not located in New York.
2. List the title of each book published by Penguin USA.
3. List the title of each book that has the type MYS.
4. List the title of each book that has the type SFI and that is in paperback.
5. List the title of each book that has the type PSY or whose publisher code is JP.
6. List the title of each book that has the type CMP, HIS, or SCI.
7. How many books have a publisher code of ST or VB?
8. List the title of each book written by Dick Francis.
9. List the title of each book that has the type FIC and that was written by John Steinbeck.
10. For each book with coauthors, list the title, publisher code, type, and author names (in the order listed on the cover).
11. How many book copies have a price that is greater than \$20 but less than \$25?
12. List the branch number, copy number, quality, and price for each copy of *The Stranger*.
13. List the branch name, copy number, quality, and price for each copy of *Electric Light*.
14. For each book copy with a price greater than \$25, list the book's title, quality, and price.
15. For each book copy available at the Henry on the Hill branch whose quality is excellent, list the book's title and author names (in the order listed on the cover).
16. Create a new table named FictionCopies using the data in the BookCode, Title, BranchNum, CopyNum, Quality, and Price columns for those books that have the type FIC.
17. Ray Henry is considering increasing the price of all copies of fiction books whose quality is excellent by 10%. To determine the new prices, list the book code, title, and increased price of every book in the FictionCopies table. (Your computed column should determine 110% of the current price, which is 100% plus a 10% increase.)

Henry Books Case

Ray Henry would like you to complete the following tasks to help him maintain his database. In the following exercises, you will use the data in the Henry Books database shown in Figures 1-17 through 1-20 in Chapter 1. (If you use a computer to complete these exercises, use a copy of the original Henry Books database so your data will not reflect the changes you made in Chapter 3.) If you have access to a DBMS, use the DBMS to perform the tasks and explain the steps you used in the process. If not, explain how you would use SQL to obtain the desired results. Check with your instructor if you are uncertain about which approach to take.

1. Create a view named PenguinBooks. It consists of the book code, book title, book type, and book price for every book published by Penguin USA. Display the data in the view.
2. Create a view named Paperback. It consists of the book code, book title, publisher name, branch number, copy number, and price for every book copy that is available in paperback. Display the data in the view.
3. Create a view named BookAuthor. It consists of the book code, book title, book type, author number, first name, last name, and sequence number for each book. Display the data in the view.
4. Create the following indexes. If it is necessary to name the index in your DBMS, use the indicated name.
 - a. Create an index named BookIndex1 on the PublisherName field in the Publisher table.
 - b. Create an index named BookIndex2 on the Type field in the Book table.
 - c. Create an index named BookIndex3 on the BookCode and Type fields in the Book table and list the book codes in descending order.
5. Drop the BookIndex3 index.
6. Specify the integrity constraint that the price of any book must be less than \$90.
7. Ensure that the following are foreign keys (that is, specify referential integrity) within the Henry Books database.
 - a. PublisherCode is a foreign key in the Book table.
 - b. BranchNum is a foreign key in the Inventory table.
 - c. AuthorNum is a foreign key in the Wrote table.
8. Add to the Book table a new character field named Classic that is one character in length.
9. Change the Classic field in the Book table to Y for the book titled *The Grapes of Wrath*.
10. Change the length of the Title field in the Book table to 60.
11. What command would you use to delete the Books table from the Henry Books database? (Do not delete the Book table.)