SYMANTEC

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The Database and
Word Processor with
Intelligence.

The Intelligent Software

Software
for the IBM® PC

*I*ntroducing Q&A", the first intelligent database that understands your own words.

Type in a normal English question like "Which Eastern Region salespeople have sales greater than their quotas?"

Q&A automatically finds and displays the answer, then prints a report if you wish.

The database is integrated with a lightning-fast word processor. Their combined capabilities handle jobs from a simple customer mailing to a complex production tracking and reporting system.

Intelligence makes Q&A easier to learn. A breeze to use. And a truly practical way to use your information.

*Y*ou can ask "What Is?"— as in "What is the total accrued vacation for each sales employee?"—and immediately have the information.

It's like asking a spreadsheet program "What If?" and instantly seeing the calculated results.

More than a convenience, Q&A's ability to understand English improves the way you work with information, just as a spreadsheet program improves the way you work with numbers.

There isn't another database that gives you the extra help Q&A does, because no other database uses "natural language processing," an advanced artificial intelligence technology, in such a practical way.

*S*OFTWARE THAT LEARNS FROM YOU. Q&A is an intelligent assistant, learning to work the way you work. The program has a built-in vocabulary of over 400 words and arithmetic symbols. As you use new words, your assistant learns them (it even learns your name for it). When you build a database, it learns the database form as well as the information in it. The more Q&A learns from you, the more it works for you.

Even though Q&A isn't all knowing, it understands complex and compound sentences, grasps follow-up questions and makes simple inference so you don't have to explain everything.

All of which helps you dig as deep as you want to get the information you need.

When you ask Q&A a question, it gives you the answer.

*E*ASY TO LEARN, EASY TO USE. Q&A is the intelligent software you don't have to be an expert to use.

It has all the standard features for easy learning and use, including a menu system with on-screen prompts, context-sensitive Help screens, "what you see is what you get" in both the database and the word processor, and a complete manual full of examples.

Q&A also introduces exclusive new capabilities, such as concurrent Help that lets you read how to do something at the same time you're doing it. But the most important capability is Q&A's intelligence.

Show me the houses that have monthly rent between $800 and $1200, listed by rent and by bedrooms.

Monthly Rent	Address	City	Bed
$800.00	5688 Rambling Way	Kenosha	03
	4982 Bluffside Road	Muskegon	04
$850.00	3765 Honey Drive	Tupelo	06
	894 Grigsby Chapel Road	Knoxville	06
$875.00	79 Stoneway	Pierre	04
$890.00	587 Wild Chien Lane	Wolf Point	06
$900.00	68 West Bonsington Road	Skull Valley	05
	5733 La Sala del Oeste	Albuquerque	04

REALTY.DTF

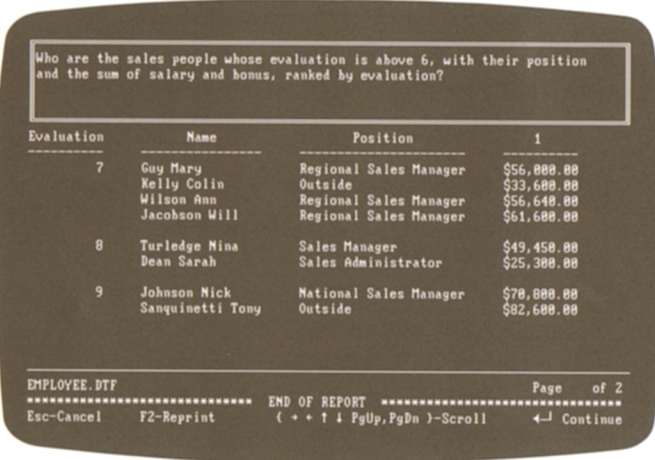Esc-Cancel   F2-Reprint   (← → ↑ ↓ PgUp,PgDn)-Scroll   ↵ Continue

Now you can really use the information you've gathered. Use it in more ways, more often, more easily, because you do it in your own words.

Here's an example, illustrated with actual screen displays. In the example, you are the Vice President of Sales. You have created a new sales region and must name a new Regional Sales Manager.

This is how you might use Q&A to provide needed information in evaluating your sales staff and selecting a new Regional Sales Manager.
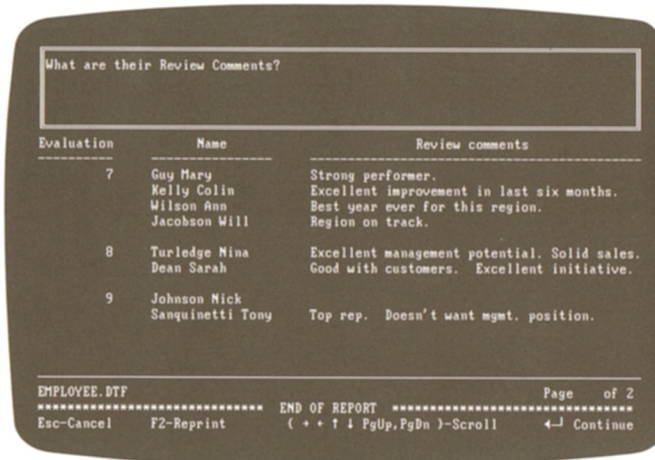
Using Q&A's intelligent assistant to manage your information is like taking the elevator after years of climbing the stairs.

USE YOUR OWN WORDS
TO FIND, SORT AND CALCULATE.

```
Who are the sales people whose evaluation is above 6, with their position
and the sum of salary and bonus, ranked by evaluation?

Evaluation      Name              Position                    1

    7       Guy Mary          Regional Sales Manager    $56,000.00
            Kelly Colin       Outside                   $33,600.00
            Wilson Ann        Regional Sales Manager    $56,640.00
            Jacobson Will     Regional Sales Manager    $61,600.00

    8       Turledge Nina     Sales Manager             $49,450.00
            Dean Sarah        Sales Administrator       $25,300.00

    9       Johnson Nick      National Sales Manager    $70,000.00
            Sanquinetti Tony  Outside                   $82,600.00

EMPLOYEE.DTF                                                   Page   of 2
========================= END OF REPORT =========================
Esc-Cancel   F2-Reprint   ( ← → ↑ ↓ PgUp,PgDn )-Scroll   ↵ Continue
```

In answering your question, Q&A knows how to select the right personnel, sort them by evaluation ratings, add their salary and bonus, and format a report in columns with headings. Note that Nina Turledge is currently Sales Manager with a high evaluation of 8.
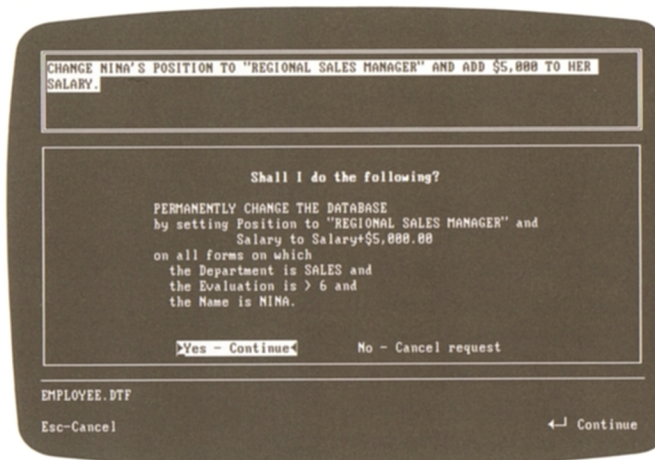
Q&A UNDERSTANDS
YOUR FOLLOW-UP QUESTIONS.

```
What are their Review Comments?

Evaluation      Name                    Review comments

    7       Guy Mary          Strong performer.
            Kelly Colin       Excellent improvement in last six months.
            Wilson Ann        Best year ever for this region.
            Jacobson Will     Region on track.

    8       Turledge Nina     Excellent management potential. Solid sales.
            Dean Sarah        Good with customers.  Excellent initiative.

    9       Johnson Nick      Top rep.  Doesn't want mgmt. position.
            Sanquinetti Tony

EMPLOYEE.DTF                                                   Page   of 2
========================= END OF REPORT =========================
Esc-Cancel   F2-Reprint   ( ← → ↑ ↓ PgUp,PgDn )-Scroll   ↵ Continue
```
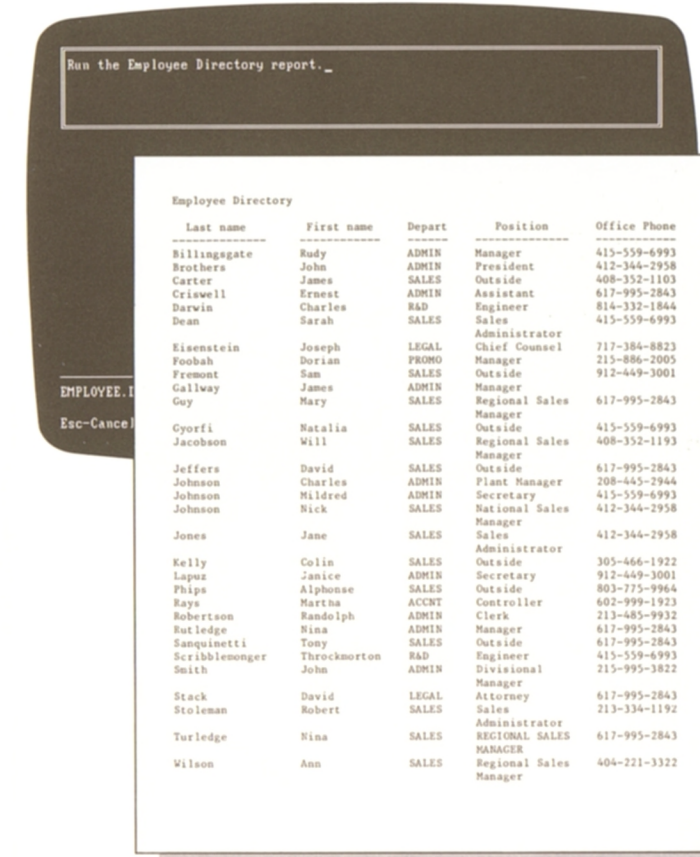
Q&A refers back to the most recent request, saving you the time of repeating it. Nina Turledge's review states that she has "excellent management potential."

UPDATE YOUR DATABASE
WITH A SIMPLE ENGLISH SENTENCE.

```
CHANGE NINA'S POSITION TO "REGIONAL SALES MANAGER" AND ADD $5,000 TO HER
SALARY.

                        Shall I do the following?

            PERMANENTLY CHANGE THE DATABASE
            by setting Position to "REGIONAL SALES MANAGER" and
                      Salary to Salary+$5,000.00
            on all forms on which
                the Department is SALES and
                the Evaluation is > 6 and
                the Name is NINA.

            ▶Yes - Continue◀        No - Cancel request

EMPLOYEE.DTF
Esc-Cancel                                              ↵ Continue
```

After Nina has been selected the new Regional Sales Manager, you can change information in her form. Your intelligent assistant reads your request and confirms it by displaying a plan of action.

GIVE THE WORD AND Q&A
PRINTS PRE-SET REPORTS.

```
Run the Employee Directory report._

EMPLOYEE.D
Esc-Cancel
```

```
Employee Directory

Last name        First name    Depart    Position          Office Phone

Billingsgate     Rudy          ADMIN     Manager           415-559-6993
Brothers         John          ADMIN     President         412-344-2958
Carter           James         SALES     Outside           408-352-1103
Criswell         Ernest        ADMIN     Assistant         617-995-2843
Darwin           Charles       R&D       Engineer          814-332-1844
Dean             Sarah         SALES     Sales             415-559-6993
                                         Administrator
Eisenstein       Joseph        LEGAL     Chief Counsel     717-384-8823
Foobah           Dorian        PROMO     Manager           215-886-2005
Fremont          Sam           SALES     Outside           912-449-3001
Gallway          James         ADMIN     Manager
Guy              Mary          SALES     Regional Sales    617-995-2843
                                         Manager
Gyorfi           Natalia       SALES     Outside           415-559-6993
Jacobson         Will          SALES     Regional Sales    408-352-1193
                                         Manager
Jeffers          David         SALES     Outside           617-995-2843
Johnson          Charles       ADMIN     Plant Manager     208-445-2944
Johnson          Mildred       ADMIN     Secretary         415-559-6993
Johnson          Nick          SALES     National Sales    412-344-2958
                                         Manager
Jones            Jane          SALES     Sales             412-344-2958
                                         Administrator
Kelly            Colin         SALES     Outside           305-466-1922
Lapuz            Janice        ADMIN     Secretary         912-449-3001
Phips            Alphonse      SALES     Outside           803-775-9964
Rays             Martha        ACCNT     Controller        602-999-1923
Robertson        Randolph      ADMIN     Clerk             213-485-9932
Rutledge         Nina          ADMIN     Manager           617-995-2843
Sanquinetti      Tony          SALES     Outside           617-995-2843
Scribblemonger   Throckmorton  R&D       Engineer          415-559-6993
Smith            John          ADMIN     Divisional        215-995-3822
                                         Manager
Stack            David         LEGAL     Attorney          617-995-2843
Stoleman         Robert        SALES     Sales             213-334-1192
                                         Administrator
Turledge         Nina          SALES     REGIONAL SALES    617-995-2843
                                         MANAGER
Wilson           Ann           SALES     Regional Sales    404-221-3322
                                         Manager
```

Frequently updated reports can be set up once and then automatically produced.

Q&A stores, organizes and presents your information like no other program, because it has the extra help of an intelligent assistant.

Database forms are patterned after familiar paper file formats. Setting a database up is simple with the help of Q&A's flexible editing, formatting and line drawing capabilities. If a database form is later changed, the information in it automatically adjusts and no data re-entry is required.

Q&A can automatically transfer in and use data from 1-2-3,* dBASE* II and III, pfs*:File, IBM Filing Assistant and other DIF and ASCII files.

Many features make it easy to create a personalized, customized database that one person can set up and another can maintain with speed and accuracy.

Custom Help screens can be created to guide users. Data validation catches mistakes. Multiple form update edits a database in one step instead of hundreds. Programmable forms, initial values, look-up tables and calculated fields automate data entry. And macros perform scores of steps with the press of a single key.

All PC databases should be as easy to use, as practical to work with.

GETTING TO YOUR DATA. Requesting information in your own words is, of course, the easiest way. Or, with a single keystroke, you can quickly "flip" forward and backward through your file, or switch between the summary view and the detail view.

Finding information is made flexible with powerful indexing, multiple keywords and 21 search operations. You can organize data any way you want by sorting on all fields in a file.

AUTOMATED REPORTS. Regularly-prepared reports can be specified once and produced automatically from then on. For a report on a particular subject, just type in the subject keyword and everything about it in the database is selected. Before printing a report, you can preview it on the screen and arrange it just the way you want.

Information in a report can be analyzed with powerful arithmetic capabilities (including Total, Subtotal, MIN, MAX, Average and others), summary reports and derived columns.

JUST WHAT YOU'D EXPECT. If you are going to keep important information in your PC, Q&A makes it simple to set up, easy to enter and fast to find. And isn't that just what you'd expect from intelligent software?

Q&A's lightning-fast word processor zips through writing projects and makes mail merge a snap.

*I*t also makes quick work of writing a production report that includes efficiency ratings. Or preparing a financial analysis that incorporates foreign trade figures.

Whatever the job, Q&A's lightning-fast word processor helps you write, edit, merge and print it in less time.

It operates entirely out of your PC's memory so you don't wait a second to see your thoughts on the screen.

The screen displays just how your document will look on paper so you don't have to waste time reformatting your work after seeing a printout. The display shows page margins, page breaks, right and left indentations, headers, footers, and underlined and bold-faced text.

The Draw feature lets you add organizational charts and other simple line drawings without a graphics card.

You can create documents up to 14 inches wide and 80 pages long, and combine documents for unlimited length.

GREAT FOR CORRESPONDENCE. One letter or an entire mass mailing is a breeze with Q&A. All word processors can do letters, but Q&A automatically prints envelopes, too. And because the word processor and database are integrated, combining a form letter with a mailing list just can't get easier.

Because no one is perfect, Q&A provides a Restore command to bring back what was just deleted. And because almost everyone is lazy, macros are available to automate repetitive work. Another work saver lets you save and later insert often-used blocks of text into any number of documents.

WORKS WITH OTHER PROGRAMS. Documents from other word processors, including pfs:Write, IBM Writing Assistant, Multi-Mate* and WordStar,* can be easily transferred to the Q&A word processor for editing.

When you are ready to print, Q&A works with more than 40 popular printers such as Epson,* Okidata, NEC, Qume, IBM, the new laser models, and more.

Just what you need to get the word out.

Specifications

INTELLIGENT ASSISTANT

Functions:
- [ ] Answer Yes/No, How Many, Who, Where, and What questions
- [ ] Run predefined requests
- [ ] Find, Sort and Display
- [ ] Create and run reports
- [ ] Run predefined reports
- [ ] Macros
- [ ] Change values on existing forms
- [ ] Mass edit of data on forms
- [ ] Create new blank forms
- [ ] Create new filled forms
- [ ] Delete selected forms
- [ ] Delete selected data within forms or groups of forms
- [ ] Define synonyms
- [ ] Request synonym information
- [ ] Find Time of Day
- [ ] Find Date
- [ ] Execute predefined printing specifications
- [ ] Built-in calculator
- [ ] Set and change name

Linguistic Knowledge:
- [ ] Simple, compound and complex sentences
- [ ] Follow-up questions
- [ ] Disjunctions
- [ ] Can be given name, will recognize it
- [ ] Regular plurals, possessives and tenses
- [ ] Date interrelationships
- [ ] Requests may interrelate multiple records
- [ ] Requests may interrelate multiple searches of the data

Word Categories:
- [ ] Field names
- [ ] Field values
- [ ] Synonyms
- [ ] Adjectives
- [ ] Comparatives
- [ ] Superlatives
- [ ] Nouns
- [ ] Locations
- [ ] Personal names
- [ ] Composite personal names
- [ ] Verbs
- [ ] Units of measure
- [ ] Database subjects
- [ ] Boolean fields
- [ ] Keyword fields
- [ ] Defined objects

Teach:
- [ ] Teach on-the-fly
- [ ] Guided teaching
- [ ] Define synonyms
- [ ] Request vocabulary information
- [ ] Edit vocabulary any time
- [ ] Database fields and values automatically placed in vocabulary
- [ ] User nameable

DATABASE

File:
- [ ] Up to 16 million forms (records) per database file
- [ ] Max. file size: 256 million bytes
- [ ] Max. record size: 16,780 bytes
- [ ] Max. fields per form (record): 2,400
- [ ] Max. number of label formats per file: 100
- [ ] Max. number of indexed fields: 115
- [ ] Max. fields per page: 240
- [ ] Numeric accuracy: 15 significant digits
- [ ] No. of search operators per field: 21
- [ ] Lookup table: 119 entries x 5 fields
- [ ] Number of data types: 7
- [ ] Multiple values (keywords) per field allowed
- [ ] Programmable inputs
- [ ] Macros
- [ ] Data type and range testing
- [ ] Custom Help
- [ ] Redesign anytime without losing data
- [ ] Print labels
- [ ] Print to pre-printed forms
- [ ] Table view of forms available
- [ ] Sort by all fields in ascending and descending order

- [ ] Concurrent, context-sensitive Help
- [ ] Line drawing
- [ ] Data entry validation
- [ ] Time and Date functions
- [ ] Multiple American and International Time, Date and data formats

Report:
- [ ] Max. number of columns: 50
- [ ] Number of Sort Levels supported: 16
- [ ] Number of Derived Columns: 4
- [ ] Number of Invisible Columns available: 50
- [ ] Number of Data Aggregation Types: 10
- [ ] Aggregation specifications per report: 800
- [ ] Max. number of report formats per file: 100
- [ ] Reports up to 240 characters wide
- [ ] Macros
- [ ] Report specifications saved to disk
- [ ] Preview on screen
- [ ] Reports automatically formatted, modifiable at user's choice
- [ ] Keyword reports

WORD PROCESSOR
- [ ] Macros
- [ ] Save or Copy block
- [ ] Max. document size: 80 pages (640K memory)
- [ ] Link documents
- [ ] What You See is What You Get
- [ ] Automatic text reformatting
- [ ] Max. document width: 240 characters
- [ ] Automatic page numbering
- [ ] Print multiple copies
- [ ] Print envelope format

- [ ] Superscript and Subscript
- [ ] Bold, Italic, and Underline text
- [ ] Dynamic centering
- [ ] Allows embedded control codes
- [ ] Standard or decimal tab
- [ ] Multiple left and right indents
- [ ] Headers and Footers up to 18 lines per page
- [ ] Block selection by cursor or logical unit
- [ ] Wrap-around search and replace
- [ ] Mail merge with File function
- [ ] Mail merge includes reformatting
- [ ] Line drawing
- [ ] Attributes retained in document

UTILITIES
- [ ] Transfer into Q&A (import) files and documents from 1-2-3, dBASE II and III, MultiMate, pfs:File and IBM Filing Assistant, pfs:Write and IBM Writing Assistant, WordStar and all programs that create DIF and ASCII format files.
- [ ] Transfer out of Q&A (export) files and documents to all programs that accept DIF and ASCII format files.
- [ ] DOS file facilities available with Q&A: List, Copy, Rename, Delete.

SYSTEM REQUIREMENTS
IBM PC, XT, AT or compatible computer, PC/MS-DOS 2.0 or higher, 512K RAM memory, two floppy disk drives or one floppy and one hard drive. Q&A supports all popular printers, including laser printers.