By now you’ve established a close relationship with the concept of a range—that collection of adjacent cells occupying a rectangular area on the worksheet (we’ll leave aside any additional nuances I may have bothered you with earlier). Now, a range can be blank, of course—a collection of adjacent, rectangular-shaped empty cells is no less a range because of its dearth of data. But when a range is filled with records—that is, a series of consecutive rows and columns containing related information topped by headings of the First Name-Last Name-Address variety—you and I might call that assemblage of data a database. If you were compiling a seating list for a formal event—even if you wrote it out on paper—you could enter Name and Table Number headings at the top of the page, and pencil in the data accordingly. Two headings, beneath which you write in the appropriate information; sounds like a database. In Excel, it could start looking like this (Figure 6–1):

![Figure 6–1. A basic Excel database](image)

That all sounds and looks good to me; but as a terminological matter Excel isn’t always so sure. Microsoft has had some difficulty making up its mind about exactly what it means by the term database, though you’re not likely to lose any sleep over the matter, and you shouldn’t. How Microsoft Access defines “database” doesn’t quite dovetail with the ways it’s been used in Excel, for example—but that won’t stop us from plunging ahead in any case. I know you like a challenge.

For our purposes, we can go ahead and define a database as a collection of data that occupies adjacent rows and columns. Each row comprises a record, and each column is a termed a field. Note I’ve omitted the headings requirement from the definition. Headings are surely a very good thing to find at the top of a database, but you can still do productive work in a database if they’re not there. What is
required, however, is that the records in a database be *consecutive*—because a completely empty row ropes off the database from any data that may appear on the other side of the blank row. Note, however—and this is important—that a record need *not* be complete. As long each record contains at least *one* populated field, the database remains in force. Now let's turn to one classic database option.

**Sorting—Sort Of Easy**

Think of your little black book—if you still have one—and ask yourself how its contents are arranged. The probable answer: in alphabetical order, more or less. That’s an equivocal reply, because your book’s little lettered tabs naturally present themselves in that order, but the names on each page are likely to be slightly *disordered*, aren’t they? You’ll post Jones, Jepson, and Jackson to the J’s, but if you’ve entered them in that sequence, now what? The three aren’t exactly alphabetized, or *sorted*—and you obviously won’t erase and rewrite the names each time you make a new entry, in order to ensure a precise listing. I’d pay big bucks to see you do *that*.

But spreadsheets (and even word processors) make the sorting process easy, and they can do far more with the data than anything your black book—or maybe even your Blackberry—can. When I taught sorting in Excel for a training firm in New York, the manual with which I worked described sorting as an advanced subject. It isn’t.

The basics—or at least the basic basics—of sorting are most elementary. If you want to sort our old favorite, the gradebook database:

1. Click anywhere in the column (field) by which you want to sort. Do **not** select all the cells in that column; just click one cell, as shown in Figure 6–2. (Selecting the column in its entirety may result in you sorting *only* that column, and not the ones on either side of it.)

   ![Figure 6–2. The gradebook with one cell in the test 3 column (field) selected—and ready to sort](image)

2. Click one of the *Sort* buttons…There’s one—the *Sort & Filter* button—in the *Editing* group in the Home tab (Figure 6–3):