

```

I=1;
IN:
...
I=I+1;
GO TO IN;

```

The ENDFILE condition provides an early exit from this loop, so if we fall out of the loop, we know there is too much data for the program to handle. We also used a GOTO in the ON ENDFILE statement, rather than placing the output code there itself, so we could keep the code laid out in the order in which it is obeyed. So long as the input routine is not too large, there is little danger of confusion.

One can also use the ON ENDFILE unit just to set a flag, which is then tested after each attempt to read. This organization requires no branching.

```

ON ENDFILE
  EOF = YES;
EOF = NO;
GET LIST (...);
IF EOF = NO THEN
  normal processing

```

In either case, the intent is to make end of file look to the rest of the program as much as possible like any other input record. We will return to this topic again later in the chapter.

Treat end of file conditions in a uniform manner.

Explicit tests for end of file and the identification of faulty data make programs easier for people to use. So does input that is easy to prepare correctly:

From *Computerworld*, October, 1971:

Loss of One Digit Brings School Scheduling Snafu

KINGSTON, MASS. — One lost column in a punched card caused several high school classes to be scheduled for one room, while scores of other students wandered aimlessly all day long, for lack of a destination.

That's the description given by local and wire service reports of a computerized scheduling snafu at Silver Lake Regional High School here, but employees of the school "didn't know we had a big problem until we read about it in the paper."

There actually were some problems, originally blamed on keypunch errors, but they were not as severe as reported.

Assistant Superintendant Norman Donegan claimed the school committee was "not particularly upset" at the problems, which were reportedly settled in two or three days.

The matter has not been dropped, but there is no intense investigation either. Donegan indicated that the company involved in the error may lose the computer contract, which is worth \$2000 a year, but that "we don't plan to stop scheduling by computer.

"In fact, we've even thought about increasing" the applications, he stated.

Donegan said that the error apparently was caused when the first digit in a three column field was dropped. The field indicates Teacher-Department-Subject, and with the omission of the teacher, the other categories became jumbled.

In other instances, the teacher indicated had left the school system, causing scheduling problems for students if a replacement had not been hired.