Subject: Determining the size of records
From: Van Snyder

1 Background

Two ways that I know to determine the length of a formatted input record, including trailing blanks, require use of non-advancing input. One way is to specify `SIZE=isize, ADVANCE="no"` and read the entire record into a character scalar by using `"(a)"` format. The other way is to read the record into a character array or scalar, one character at a time, in a loop, using `ADVANCE="no"`. Both are cumbersome. Neither can be used with list-directed formatting.

It would be easier to specify `SIZE=isize` (implying `ADVANCE="yes"` unless 99-127 is approved) and read the entire record into a character variable by using `"(a)"` format.

Unfortunately, SIZE= can only be specified if ADVANCE= is also specified, and the ADVANCE= specifier evaluates to NO. This restriction appears to be a burden rather than a benefit to compiler developers. It also seems to provide no benefit to restrict SIZE= to READ statements.

2 Edits

Edits refer to 99-007r1. Page and line numbers are displayed in the margin. Absent other instructions, a page and line number or line number range implies all of the indicated text is to be replaced by immediately following text, while a page and line number followed by + indicates that immediately following text is to be inserted after the indicated line. Remarks for the editor are noted in the margin, or appear between [and] in the text.

Constraint: A SIZE= specifier shall not be specified in an unformatted data transfer statement.	201:5
[Editor: Delete]	201:13-14
[Editor: Remove “nonadvancing” twice. Change “input” to “data transfer” thrice.]	202:37-1

3 More background

Now that we have “file storage units” it seems to provide no benefit to restrict SIZE= to formatted data transfer statements.

4 Alternative edits

[Editor: Delete.]	201:5
[Editor: Delete]	201:13-14
[Editor: Remove “nonadvancing” twice. Change “input” to “formatted data transfer” thrice.]	202:37-1
[Editor: Add a new paragraph:]	203:3+

For unformatted data transfer, the variable specified in the SIZE= specifier becomes defined with the count of file storage units transferred.