



APRIL 6, 1970

NEWSLETTER

VOLUME 2, NUMBER 2

ST. PAUL CAMPUS COMPUTING CENTER
26 NORTH HALL
ST. PAUL CAMPUS
373-0987 373-0990

IMPLICIT DIMENSION(I,J,K)
.GT.
LOGICAL READ(N,FMT,END=10,ERR=20)LIST
.FALSE. NAMELIST I/O
.LT.
TRACE OFF
.TRUE.
G-FORMAT
ENTRY
READ
.EQ.
.PRINT
Z-FORMAT
.NOT.
PUNCH
.DEBUG
.AND.
.LE.
DISPLAY
.NE.
.L-FORMAT
RETURN KTH
.COMPLEX
.OR.
.TRACE ON
DATA STATEMENT
.LOGICAL IF
.BLOCK DATA
.DIMENSION ARRAY(2,2,2,2,2,2)
.GE.
.ASSIGNED GO TO

C O N T E N T S

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## NEWSLETTER COVER COMMENTS

This cover is an announcement of the new F-level FORTRAN compiler. (See page 2 regarding the F-level FORTRAN seminar). We urge our FORTRAN users to utilize this compiler because of the following:

New features: Many new features and options (see cover for some of these features) are available in this compiler.

Compatibility: This compiler is compatible with the previous Basic (Level E) FORTRAN.

Debugging: The debugging aids in this compiler are much better than those of Basic FORTRAN.

The control cards required by the F-level compiler remain the same except:

1. Use // EXEC FFØRTRAN instead of // EXEC FØRTRAN.
2. Only one // EXEC FFØRTRAN card is required ahead of the entire source deck (includes all FORTRAN subprograms).
3. Only one /\* is required at the end of the entire source deck.

Warning: Do not attempt to combine relocatable decks generated under Basic FORTRAN (E-level) with source or relocatable F-level FORTRAN decks.

Page Positioning: In both levels of FORTRAN it is the programmer's responsibility to position his first page of output.

## ANNOUNCEMENTS

We are pleased to announce the appointment of Miss Agnes Leong to our programming staff. Miss Leong is a recent graduate of Augustana College, Sioux Falls, S. Dak. She majored in math and her programming experience is primarily in FORTRAN.

The Center recently welcomed a new member to its staff as a Computer Operator, Richard (Dick) Rignell. We are sure that you will find him well qualified for the position.

(Continued on next page)

This is a reminder to those who still have boxes of cards stored at the Center, and have not labeled them or filled out a disposition sheet, **contact** Jim Palodichuk, 373-0987.

Those persons who are interested or know of someone who is interested in "Key Punching" as a vocation, please contact Agnes Miron, Key Punch Supervisor or Jim Palodichuk, Operations Supervisor. Telephone 373-0992 or 373-0987.

F-L E V E L F O R T R A N S E M I N A R

SPCCC is offering a 1 1/2-hour F-level FORTRAN Seminar on Thursday and Friday, (April 16 and 17) at 3 PM, in Room 6A (Lounge area) North Hall. This session is primarily for those who have some working experience in Basic FORTRAN. The session will include:

1. Introduction to New Features
2. Debugging Methods
3. Discussion Period

Please return the form below so an adequate amount of handout material can be obtained.

-----  
F-Level FORTRAN Seminar

Name: \_\_\_\_\_

Dept: \_\_\_\_\_

Campus Telephone: \_\_\_\_\_

Plan to attend Session 1 (3 PM, Thursday, April 16)

Plan to attend Session 2 (3 PM, Friday, April 17)

Note: The same material is covered at both sessions.

If more than one person is utilizing this form, please specify the number of people next to the appropriate box.

Mark the date on your calendar and return the form to:

Eva Klein  
Computing Center  
26 North Hall  
St. Paul Campus

ADVENTURES IN FORTRAN

Currently at Level F/DØS

CURRENT PROBLEM:

Generate and print the values 0 through 10 in descending order.

Program:

```
DIMENSION IVAL(11)
DØ 5 I=1, 11
5 IVAL (I)=11-I
PRINT 1, IVAL
1 FØRMAT (11I2)
CALL EXIT
END
```

Note: PRINT is allowed in F-level FORTRAN.

Question: Does the program print the requested values as stated in the problem?

If not, what happens?

-----  
ANSWER TO PREVIOUS PROBLEM:

Problem: The data card to be read by this program is punched '22' in  
columns 1 and 2.

```
READ(1, 1)F, I
1 FØRMAT(2A1)
IF(F-I)20, 10, 20
10 J=1
GØ TØ 30
20 J=2
30 WRITE(3, 2)J
2 FØRMAT(I3)
CALL EXIT
END
```

What value of J is printed out? The value is 2.

Why? When an arithmetic operation occurs (in this case the IF statement) FORTRAN recognizes a mixed mode expression and converts the value of I to a real value before performing the operation. Due to this conversion, an equality cannot exist.

OPTICAL CHARACTER READER (OCR)

The Center is presently evaluating an IBM 1287 Optical Character Reading device for entering data directly into the Computer from source information sheets, thus avoiding the time consuming and costly key-punch operation. Although there are a number of restrictions in the use of such equipment, we feel that the advantages warrant serious consideration. We therefore wish to field-test this particular device. For this purpose, we have obtained a number of specially designed forms, for recording numerical information. These forms will be read with optical equipment and the results will be analyzed. Those who wish to participate in this field-test may do so by attending a seminar on Optical Character Recognition.

Time--- Wednesday, April 8, 2:05 - 3:00 PM

Place---100 North Hall (Punchinello Theatre)

Bring standard number 2 pencil.

MAILING LIST CHANGES

If you wish to be included in our newsletter mailing list or wish to remove your name from the list, please fill out the following form and return to Mrs. Eva Klein 26 North Hall. If you have any colleagues to whom the newsletter might be of interest, please show them this issue.

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- Remove my name from mailing list
- Add my name to mailing list
- Change my address

Name \_\_\_\_\_

Dept. \_\_\_\_\_

Campus Address \_\_\_\_\_

Name \_\_\_\_\_

Dept. \_\_\_\_\_

Campus Address \_\_\_\_\_