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NEWS LETTER

September 19, 1968
Volume 1, Number 8

26 North Hall
St. Paul Campus
373-0987 373-0990

CHANGE IN TELEPHONE NUMBERS

On September 16, 1968, our two major lines for incoming calls (647-3397 and 647-3717) were changed to 373-0987 and 373-0990 respectively. Although there are a number of private lines in the Center, these two new numbers should be utilized for the majority of calls to the Computing Center. There is one exception to this, and that is, in making calls to the Key Punch section please use 373-0992.

KEY PUNCH OPERATORS NEEDED

At the present time we are looking for and are very much in need of experienced Key Punch Operators who can work on our day shift (7:45 AM to 4:30 PM) or our night shift (4:30 PM to 9:30 PM). If you know of someone who would be interested, please have them contact:

Elaine Brackey Day Key Punch Supervisor 373-0992

Julie Heim Night Key Punch Supervisor 373-0992

We hope our customers can bear with us until we are adequately staffed to handle the highly increased demand for key punching services.

FORTRAN FUNCTIONS AND SUBROUTINES AVAILABLE

The Center has recently cataloged three additional routines of general interest in our relocatable library on disk. These routines may be retrieved and incorporated into a user's FORTRAN program by simply making use of the function or subroutine name and appropriate argument. The names given these on-line routines are reserved words --- meaning that no other user functions or subroutines should be assigned the same names. The following describes the three routines now available.

1. NUTIME (Function)

The use of this function yields the time in seconds that have elapsed since the beginning of the day, that is, since midnight (the computer clock is operated as a 24 hour clock and is always set relative to midnight).

2. NUDATE (Function)

The use of this function yields the current day, month and year that is stored in the computer. In this manner a user may make use of the date as stored for needs such as editing data, dating reports, etc.

3. CHOVER (Subroutine)

This routine has the facility of replacing the asterisk(s) in a field overflow condition with any other desired character including a blank. As most users know, the object code generated from the FORTRAN compiler produces a string of asterisks when the field definition as described by a format statement is inadequate to handle the magnitude of the number being outputted. The use of this function gives a user the facility of purposely causing a field overflow to produce a field of any desired character string including a blank.

Write-ups on the above routines may be obtained from the secretary,
26 North Hall.

PAPER TAPE TO CARD PUNCH DEVICE

The Computing Center recently installed an IBM 047 Paper Tape to Card Punch device. By control board wiring this machine can read either 5-track or 8-track paper tape and punch the information therein contained in 80-column cards. The 047 operates at a normal rate of eighteen columns per second and has a tape supply reel and tape rewind reel capacity of 300 feet.

Although the 047 can handle a large variety of paper tape coding systems, we suggest that prospective paper tape users first check with the Computing Center personnel to ascertain the compatibility of their coding system with the interpretative capabilities of the 047.

MAGNETIC TAPE UTILIZATION ORIENTATION CLASS

Being that the recent addition of magnetic tape drives to our Computer system has added a considerable number of new facilities to our Input and Output capabilities, we are holding two tape utilization orientation classes. The classes will be held Tuesday, September 24, 1:00 to 3:00 PM and Friday, September 27, 1:00 to 3:00 PM. Although the classes will be geared to individuals knowing basic FORTRAN, everyone is welcome. Individuals attending one session need not attend the other. The following topics will be discussed:

1. IOCS (Input-Output Control System).
2. Blocking and deblocking data.
3. Tape identification and control.
4. Tape creation and updating methods.
5. Tape sorts.
6. Tape utility programs.
7. Tape header and trailer records.

MAGNETIC TAPE DRIVES

Two additional magnetic tape drives have recently been installed on our computer system bringing the total number of tape drives to three. All three drives have the recording capacity of 800 characters to the inch (800 BPI) and operate in the 9 track mode. The FORTRAN device reference numbers in channel sequence (left to right) are 8, 9 and 10.

Individuals who wish to make use of magnetic tape should make the necessary arrangements with the Computing Center before attempting to make computer runs. It is important that all magnetic tapes used in the Computing Center be handled under rigid control.

For FORTRAN users the following program module demonstrates the use of the proper FORTRAN unit assignments of these three tape devices in a merge operation (ascending order disregarding end of file tests):

```
        DIMENSION DATA1(25), DATA2(25)
        ISW = 0
2       READ (8, 1) ID1, DATA1
1       FORMAT (I4, 25A4)
        IF (ISW) 7, 3, 7
3       ISW = 1
        READ (9, 1) ID2, DATA2
7       IF (ID1 - ID2) 5, 5, 4
5       WRITE(10, 1) ID1, DATA1
        GO TO 2
4       WRITE (10, 1) ID2, DATA2
        GO TO 3
```

NEWSLETTER 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 it 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.

Name _____

Dept. _____

Campus Address _____

Name _____

Dept. _____

Campus Address _____