SAS AND MUSIC SEMINARS

The St. Paul Computer Center will be offering two short courses this quarter. One course will cover the Statistical Analysis System (SAS), a comprehensive statistical package available on the IBM 4341 computer at SPCC. In addition to statistics, SAS provides software tools for data storage and retrieval, report writing, general programming, forms generation, and graphics.

The other course will cover the McGill University System for Interactive Computing, an interactive operating system called MUSIC. The MUSIC operating system will allow you to edit and save files, submit batch jobs, or run jobs interactively.

For those users who would like to access SAS remotely via an interactive terminal, MUSIC will allow you to submit jobs to SAS and get the output back on a disk file.

The courses will be given on the Minneapolis campus this quarter.

Course schedules :

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SAS     Jan      24,26,28 (M,W,F)   3:15-5:15   10 Arch   Mpls
MUSIC   Jan/Feb 31, 2, 4 (M,W,F)   3:15-5:15   10 Arch   Mpls
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If you have a group of 12 or more people interested in the SAS or MUSIC seminars, SPCC will schedule a class just for your group. Please contact Mel Sauve at 373-0987 to make the necessary arrangements.

ORIENTATION SEMINAR

This seminar consists of introducing new and prospective users to the services and facilities of the St. Paul Computer Center. A brief description of the hardware, software and services available at SPCC will be given. The seminar is scheduled for the Minneapolis campus on the following day:

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Jan 20  Thursday  3:15-5:15  35 Arch  Mpls
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DATA ENTRY WORKLOAD

At the present time, the data entry workload varies greatly from week to week. Consequently, the turnaround time could be a couple of days for small projects or as long as two weeks for larger ones. Please feel free to call Linda Pichner or Cleo Medlock at 376-9222 for current turnaround time or any other job related questions.

In order to have your data keypunched, you must have an account number with SPCC. UCC account numbers and SPCC grant accounts do not cover data entry services. Any questions regarding SPCC accounts should be referred to Diane Suski at 373-0987.

The hours for data entry services remain 8:00 - 4:30, Monday through Friday.

3270 TERMINALS IN THE USER ROOM

SPCC has installed two additional 3270 type crt terminals in the users room, 90 Coffey Hall. This brings the total number of terminals to six. These full screen terminals are available to all user's on a first come first served basis. These terminals are attached directly to the IBM 4341 computer and can communicate with the computer at a very high speed. The 'full screen' capabilities of 3270 terminals allow users who have become proficient in using a 3270, to achieve very high levels of productivity. Experienced users can quadruple their productivity, relative to working with key-punches and cards. A two-fold increase in productivity, relative to dialup terminals (DECWRITERS, TI-700's, tty's etc.), can be expected. Users who are already familiar with MUSIC should contact the consultant in room 90 Coffey Hall for an introduction to the 3270 terminals. If you are not familiar with MUSIC, we recommend attendance at one of our upcoming seminars.

SAS NOTES

The SAS Institute Inc. released new manuals this fall for the 1982 release of SAS. The SAS User Guide comes in two manuals:

* SAS/Basics   923 pages $14.95

* SAS/Statistics 584 pages $14.95

Both of these manuals will be available at the Williamson bookstore, the St. Paul Campus bookstore, and at the St. Paul Computer Center office.

It should be noted that these manuals document the new 82.1 release of SAS which has not yet been made available to SPCC from SAS, Inc. Some users may find a few new features illustrated in the manuals that will not be on our system until the new release is installed. SAS Inc. has promised a release of SAS 82 for CMS in 2 or 3 months.

A 15 page handout is available from SPCC that briefly describes most of the SAS procedures supported at SPCC. The handout is intended to help current and potential users of SAS to determine which SAS procedure will best meet their computing and/or statistical needs.

SUGGESTION BOX

SPCC has placed a suggestion box in the user's room in 90 Coffey Hall. Anyone, who has a good constructive comment or suggestion relating to the operation of SPCC, should feel free to place their observations in the box.

INTERACTIVE COMPUTING

One of the strongest trends in the data processing industry today is the user's desire for more immediate and convenient access to the computer. The St. Paul Computing Center has long provided batch computing services to our users. About a year ago, we began offering interactive access to the IBM 4341. These services have been well received by many of our users, but there is a significant group of our users who still submit jobs on card decks. This is partially due to resistance to change, but the major reason is probably our own failure to expose our users to the advantages of interactive computing. Our presumption was, that having installed a better mousetrap, the world would beat a path to our door. In the coming months, we will be taking a more aggressive approach. We think many of you, who have not yet beat a path to our door, will like what you see and try some of our new services.

Interactive computing has several advantages over traditional batch computing via card decks. The interactive editors provide a means of changing data files and program files much faster and more conveniently than with a keypunch. Turnaround time between jobs is shortened. For batch jobs, the time spent waiting for the operator to pickup your card deck before running your job and then returning the output after running it, is eliminated. Many tasks which you may now be doing in a batch mode can be run interactively, with absolutely no wait at all.

Besides making your current computing work easier to perform, our interactive services provide access to capabilities which have not previously been available to our batch users. These include text processing, computer aided instruction and high-level languages for more easily recording, storing and accessing your data.

The Saint Paul Computing Center offers two interactive operating systems, MUSIC and CMS. Although MUSIC and CMS share some common features, they differ significantly in specific services offered and general capabilities.

The McGill University System for Interactive Computing (MUSIC) was developed at McGill University in Montreal. MUSIC is an interactive system complete with a collection of utilities, compilers, and application packages. Concurrent users may perform such diverse activities as problem solving, program development, file editing, word processing, computer assisted instruction, and batch processing. Flexible hardware facilities enable its use over a broad range of terminal types and micro computers. We feel that almost all of our users will find MUSIC to be very adequate and easy to use.

The most popular service offered by SPCC is the Statistical Analysis System (SAS). MUSIC provides the SAS user with a means to interactively create and maintain data files and SAS programs. Although SAS does not execute in the MUSIC environment, MUSIC provides convenient facilities for submitting SAS jobs and retrieving the output from those jobs. MUSIC users spend less time creating and maintaining their data and programs and much less time waiting for the output from their runs than users who are using card decks.

There are two FORTRAN compilers available on MUSIC. They are FORTG1 from IBM and WAT-FIV from the University of Waterloo. FORTG1 is IBM's G-level FORTRAN with a few enhancements. McGill has developed a library of utility subroutines which allow FOR-

TRAN programs to create, open and/or delete files, 're-read' records with more than one format and manipulate character strings, among other things. WATFIV was designed to efficiently process large numbers of small programs. It's advantages are fast compilation and improved diagnostic messages. WATFIV is a good compiler for occasional FORTRAN users or for instructional purposes.

SCRIPT is IBM's text processing system. The current version of SCRIPT, as offered by IBM, is a very sophisticated and sightly complex system. There are several dialects of SCRIPT which have been originated from early releases of SCRIPT and it's predecessors. MUSIC/SCRIPT is one of these dialects. MUSIC/SCRIPT offers basic text processing capabilities which are suitable for project documentation, thesis and manuscript preparation and other 'ordinary' text processing needs. As with other features of MUSIC, MUSIC/SCRIPT is easily learned.

IBM's Conversional Monitor System (CMS) is the other interactive system available at SPCC. CMS is an extremely powerful and flexible computing system which can support a wide range of products. We have not actively encouraged the use of CMS in the past, primarily because of a lack of training materials. In the coming year we will be acquiring and/or developing a means of teaching CMS to interested users. Users, who have projects which are not easily handled by MUSIC or those who require access to products not available in MUSIC, will be interested in learning CMS. Because IBM and other vendors are continually releasing new products that run under CMS, SPCC feels very good about the future of CMS.

If you have an interactive terminal and you are presently accessing other computer systems, your terminal will most likely work fine on SPCC's system also.

SPCC GENERAL INFORMATION

SPCC general hours and telephone numbers:

    MAIN OFFICE   : 50 Coffey Hall 373-0987 (8:00- 4:30)
    USERS ROOM   : 90 Coffey Hall   (7:00-10:00)
    HELP LINE   :   376-4602 (10:00-12:00) (1:00- 4:00)
    DATA ENTRY   : 6 North Hall   376-9222 (8:00- 4:30)

SPCC computer and user room hours:

    Monday-Friday : 7:00 AM - 10:00 PM
    Saturday   : 8:00 AM - 4:30 PM

If you would like to be placed on the SPCC newsletter mailing list, please contact Diane Suski at 373-0987.