

ALTER	m, n	Resets the contents of location m in the users program with value n, m and n have several formats.
ASSIGN	peripheral name, sfn	Input assignment.
ASSIGN	peripheral name	Output assignment.
ASSIGN	peripheral name, CONS	Output assignment.
CONDENSE		Removes all deleted subfiles from the users file.
DATE		Prints the date.
EDIT	sfn, sfn*	Loads the Editor in readiness to edit a subfile.
ENTER n		Enters the users program at location $20 + n$.
ERASE	sfn	Marks this subfile deleted in the file.
FIND	program name	Loads the specified program from the library.
FORLOAD	sfn, CONS*	As ALGLOAD but for a FORTRAN program.
FORTRAN	sfn, sfn, CONS*	As ALGOL but for a FORTRAN program.
INPUT	sfn	Introduces a new subfile. Subsequent lines of input up to **** are stored in the subfile.
JEAN		Loads the JEAN program and enters it.
LISTFILE	sfn, peripheral name*	Output the subfile to the console or system output file.
LOAD	sfn, CONS*	Consolidates and loads the semi-compiled program in the subfile.
LOGIN	file name	Opens the users file and prepares to check the password.
LOGOUT		Disconnects the user from the system closing his file and printing accounting information.
MACDEF	sfn	As for INPUT but each line of input represents a command.
NEWPASSWORD	password	Changes the password of the users file.
OBEY	sfn, X, Y, Z . . .	Implements the commands listed in the subfile. X, Y, Z, etc., are actual parameters which replace original undefined parameters %A, %B, %C, etc.
PLAN	sfn, sfn, CONS*	As ALGOL but for a PLAN program.
PLNLOAD	sfn, CONS*	As ALGLOAD but for a PLAN program.
PRINT	m, n	Outputs the contents of locations m to $m + n - 1$.
RESTORE	sfn	Restores the users saved object program as his current object program.
SAVE	sfn	Saves the user's current object program in his file.
SUMMARY		Prints a summary of the users file at the console.
TIME		Prints the time.

N.B. * denotes optional parameter, sfn denotes subfile name

Book Review

Numerical Methods for Partial Differential Equations, by William F. Ames, 1969; 291 pages. (Thomas Nelson and Sons Ltd., £3.25 paper.

In the preface, the author states that the present volume constitutes an attempt to introduce to upper level engineering and science undergraduate and graduate students the concepts of modern numerical analyses as they apply to partial differential equations. In his attempt the author has most certainly succeeded and has produced a most readable and lively text. The contents cover both initial, boundary and eigenvalue problems with reference (where appropriate) to elliptic, parabolic and both first and second order hyperbolic problems. The author's style of giving reasonably meaningful practical exam-

ples of application of the methods combines with his semi-rigorous approach to the more theoretical problems of stability and convergence.

The student will find some 250 exercises spread throughout its five chapters whilst 400 references (up to the year 1968) will be of more interest to the more experienced reader. If I were to find fault with this book it would be in the scant treatment given to multidimensional problems in comparison with intensive discussion of one and two dimensional problems. However, the author is probably justified in the virtual exclusion of such topics as his aim is primarily to produce a student textbook. With this in mind the author is to be congratulated on the outcome.

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