Introductory Note

This quick reference guide is designed to supplement the dBASE II User's Guide and dBASE II Reference Manual as well as the HELP file. The guide has been created to give you a summary of information necessary for the operation of the dBASE II program under CP/M-80 and compatible operating systems. It is essential for the full screen editing modes that dBASE II is configured using the install program to match the screen control/terminal escape codes of your host CP/M-80 system.

Typographical Conventions

Lowercase	user-supplied information
UPPERCASE	explicit portions of dBASE II commands
[...]	optional portions of dBASE II commands
<...>	user-supplied portions of dBASE II commands

File Naming Conventions

File names may be up to 8 characters (no spaces) long

Field Naming Conventions

Field names may be up to 10 characters (no spaces) long, must start with a letter, but can include digits and embedded colons

dBASE II Data Types

C	Character data. Includes any printable console (ASCII) character.
N	Numeric data for calculation. Includes numbers.
L	Logical data. Includes Y,y,T,t for True, or N,n,F,f for False.

Cursor Movement and Control Keys

Control Keys used in conjunction with Edit, Modify, Append, Create or Insert

CTRL F	Moves cursor down to the next field
CTRL J	
CTRL A, CTRL E, CTRL K	Moves cursor up to the previous field. When the cursor is positioned on the first character of the first field in a record, this command moves the cursor back to the first character in the first field of the previous record
CTRL D	Moves cursor ahead one character
CTRL S	Moves cursor back one character within a field, and back one field from the first character of a field. When the cursor is positioned on the first character of the first field in a record, this command moves the cursor back to the first character in the first field of the previous record
DEL, CTRL G, CTRL X	Deletes character under the cursor
CTRL C	Saves changes and advances to the next record
CTRL R	Saves changes and backs up to the previous record
CTRL W	Saves changes to current record and returns to dBASE II command mode
CTRL Q	Aborts changes in current record and returns to dBASE II command mode
CTRL Y	Erases field
CTRL U	Toggles record deletion mark on/off
CTRL V	Toggles insert/ overtype modes
CTRL P	Toggles printer on/off

Terminology

<commands> or <statements>	any valid dBASE command or function
<cstring>	character string(s). In most instances must be delimited with single quotes (' '), double quotes (" "), or brackets ([ ])
<cstring exp>	an <exp> whose contents is defined as Character in type. May be a cstring, a memvar or field with character content, or any combination of these items and operators
<delimiter>	any non-alphanumeric character used to demarcate data, e.g., single quotes (' '), double quotes (" "), brackets ([ ]), colons|(: :), commas (, ,), etc
<exp> or <expression>	an item or group of items and operators whose value can be determined by dBASE II <exp>s may be defined as C, N, or L depending upon the "type" of data they contain
<exp list>	a list of expressions delimited with commas
<field>	a record field name
<field list>	a list of field names delimited with commas
<file>	name of file you wish to create or access
<index file>	name of index file you wish to create or access
<key>	the portion(s) of a database file used to create an index file
<memvar>	the name of a memory variable
<memvar list>	list of memory variables delimited with commas
<n>	a number which dBASE II regards as a literal value
<numeric exp>	an <exp> whose content is defined as Numeric
<scope>	command option specifies range of records dBASE II must treat in executing command. <scope> has three possible values: ALL records in file: NEXT n records in file; and RECORD n. Default value varies from command to command
<skeleton>	allows batch manipulation of files of same type and/or with matching cstring in filename; allows batch manipulation of groups of with matching cstring in name

Operators Used for Data Manipulation

Logical Operators (listed in order of precedence)	
()	parentheses for grouping
.NOT.	logical not (unary operator)
.AND.	logical and
.OR.	logical or
$	substring logical operator
Arithmetic Operators (listed in order of precedence)	
()	parentheses for grouping
*	multiplication
/	division
+	addition
-	subtraction
Relational Operators	
<	less than
>	greater than
=	equal to
< > or #	not equal to
<=	less than or equal to
>=	greater than or equal to
String Operators	
+	string concatenation
-	string concatenation blanks moved to far right

dBASE II File Types

.PRG	command file
.DBF	database file
.FMT	format file
.FRM	report form file
.MEM	memory file
.NDX	index file
.TXT	text output

Functions

*	deleted record function evaluates as logical True if current record is marked for deletion.
#	record pointer (a system memory variable) stores the number of the current record.
&	macro function permits the use of a <memvar>'s stored value in a command line. (<memvar>'s value must be a 'cstring')
!(<cstring exp>)	upper case function converts all lowercase characters to upper case
$(<exp>,<start>,<length>)	substring function extracts the specified part of from the given starting position for the given length.
@(<cstring exp 1>, <cstring exp 2>)	substring search function yields an integer value indicating where the first string appears in the second.
CHR(<numeric exp>)	yields the ASCII character equivalent of a numeric expression.
DATE ()	name of system variable containing the system date
EOF	End-Of-File function evaluates as a logical True when last record of USE file has been surpassed.
FILE(<file>)	file function evaluates as a logical True if named file exists on disk in use.
INT (<numeric exp>)	integer function truncates everything to the right of the decimal to form an integer.

LEN (<cstring exp>)	length function returns the number of characters in the specified <cstring exp>.
RANK (<cstring exp>)	returns the (ASCII numeric) value of the leftmost character of <cstring exp>.
STR (<numeric exp>)	string function converts specified portion of <numeric exp> into a cstring.
TEST (<exp>)	test can be used to determine if an expression is valid.
TRIM (<cstring exp>)	trim function removes trailing blanks from specified cstring
TYPE (<exp>)	type function indicates data "type" of indicated <exp>
VAL (<cstring exp>)	value function converts a cstring (composed of numerals) into a numeric expression

dBASE II Commands

?<exp>	evaluates and displays value of <exp>
@<coord> [SAY <exp> [USING 'picture']] [GET <var> [PICTURE 'picture']] e.g. @ 8,5 say "amount" get amount picture '$9.99'	format console screen or printer output, where 'picture' comprises a defining string for the format of the input variable <var>. The output expression <exp> should be enclosed in a matched pair of single or double quotes. 9 or # Accept only digits as entry A Accept only alphabetic characters ! Convert character input to upper case X Accept any characters $ Show '$' on the screen * Show '*' on the screen
ACCEPT ['prompt'] TO <memvar>	prompts user to input cstring into specified <memvar>. Input requires no quotes
APPEND [BLANK]	add record(s) or blank, formatted record to database file
APPEND FROM <file> [SDF] [DELIMITED] [FOR <exp>]	appends data from a database or system data format file into database file in use
BROWSE [FIELDS<field list>]	allows full screen "window" viewing and editing of database file in use
CANCEL	aborts command file execution
CHANGE [<scope>] FIELD <list> [FOR <exp>]	permits selective editing of records by field
CLEAR	"resets" dBASE II
CONTINUE	continues a LOCATE command
COPY TO <file> STRUCTURE [FIELD <list>]	copies structure of file in use to designated file
COPY TO <file> [<scope>] [FIELD <list>] [FOR <exp>]	copies file in use to designated database file
COPY TO <file> [<scope>] [FIELD <list>] [SDF] [DELIMITED [WITH <delimiter>]] [FOR <exp>]	copies data from file in use to file with designated name and format.
COPY TO <file> STRUCTURE EXTENDED	creates a database file whose records represent the structure of the file in use
COUNT [<scope>] [FOR <exp>] [TO <memvar>]	counts records that satisfy some condition. Default value is all records
CREATE [<file>]	initiates creation of database file
CREATE <newfile> FROM <oldfile> EXTENDED	creates database file whose structure is determined by the data contained in the records of the (Used with COPY STRUCTURE EXTENDED)
DELETE [<scope>] [FOR <exp>]	marks specified records for deletion
DELETE FILE <file>	deletes specified file

DISPLAY [<scope>] [<field list>] [FOR <exp>] [OFF]	displays records of database file in use
DISPLAY FILES [ON <disk drive>] [LIKE <skeleton>]	displays files on disk. Default values: database files, logged drive
DISPLAY MEMORY	displays current <memvars>
DISPLAY STATUS	displays system information: e.g., system date, files open, index files and keys, and all SET parameters
DISPLAY STRUCTURE	displays structure of file in use
EDIT[n]	initiates selective editing of database file in use
EJECT	commands printer to perform a form feed (eject page)
ERASE	clears console screen
FIND <cstring>	locates first record in indexed database file whose <key> matches the specified <cstring>
GO or GOTO <n> or <TOP> or <BOTTOM>	positions to specific record or place in the database file in use
HELP [<command verb or other entry>]	accesses Help File overview or specific Help File entry for brief explanation of specified command mode, function, etc
INDEX ON <key> TO <file>	creates an index file for the database in use
INPUT ['prompt'] TO <memvar>	prompts user to enter <exp> into already named
INSERT [BEFORE] [BLANK]	inserts a new record anywhere in database file
JOIN TO <FILE> FOR <exp> [FIELDS <list>]	creates new database file by merging records of files in use in Primary and Secondary areas for which FOR <exp> evaluates as logical True
LIST [<scope>] [<field list>] [FOR <exp>] [OFF]	lists records of file in use
LIST FILES [ON <disk drive>] [LIKE <skeleton>]	lists files on disk. Default values: logged drive, database files
LIST MEMORY	lists current <memvars>
LIST STATUS	lists system information e.g. system date, files open, index files and keys, and all SET parameters
LIST STRUCTURE	displays structure of file in use
LOCATE [<scope>] [FOR <exp>]	finds first record which satisfies specified condition. Use Continue to reach next such record
MODIFY COMMAND <file>	calls dBASE II's text editor and brings up designated file for modification
MODIFY STRUCTURE	allows structural modification of database file in use. Will delete all records in current database.
NOTE or *	commands dBASE II not to read the rest of command line Used to insert programming comments in command files
PACK	eliminates records marked for deletion
QUIT [TO <list CP/M level commands or .COM files>]	terminates dBASE II and returns control to operating system. Optionally calls system level programs. The command file names must be enclosed in single quotes and separated by commas
READ	initiates full-screen editing of a formatted screen, and accepts data into GET commands
RECALL [<scope>] [FOR <exp>]	reinstates records previously marked for deletion
REINDEX	updates index files not in use during alteration of corresponding database file
RELEASE [<memvar list>] or [ALL] or [ALL LIKE <skeleton>] or [ALL EXCEPT <skeleton>]	eliminates unwanted <memvars> from current memory
REMARK	permits display of following characters. In command file is used to output comments to screen or print
RENAME <oldfile> TO <newfile>	permits renaming of file

REPLACE [<scope>] <field> WITH <exp> [,<field2> WITH <exp2> ...] [FOR <exp>]	replaces the value of specified fields of specified records with stated values
REPORT [FORM <filename>] [<scope>] [FOR <exp>] [TO PRINT]	generates or accesses existing Report Form File for output of data in user-defined format
RESET	reset CP/M after disk swap
RESTORE FROM <file> [ADDITIVE]	retrieves and activates <memvars> previously saved in .MEM file. Deletes all current <memvars> unless Additive option employed
RETURN	terminates a command file and returns control to calling file or interactive mode
SAVE TO <file> [ALL LIKE <skeleton>] [ALL EXCEPT <skeleton>]	saves all current (designated) <memvars> to .MEM file
SELECT [PRIMARY] or [SECONDARY]	switches between dBASE II's primary and secondary work areas
SET	see below for all SET commands
SKIP [+/-n]	moves forward or backwards through the records of the file in use. Default value: +1, +n
SORT ON <key> TO <file> [ASCENDING] or [DESCENDING]	creates a version of the database file in use whose records are arranged alphabetically or numerically according to the information contained in the field specified as the SORT <key>. Default value: ascending
STORE <exp> TO <memvar>	computes the value of <exp> and stores it to the designated <memvar>
SUM <field list> [TO <memvar list>] [<scope>] [FOR <exp>]	computes and displays the sum of numeric fields
TOTAL TO <file> ON <key> [FIELDS <field list>] [FOR <exp>]	generates a summary version of an indexed or pre-sorted database file which contains the totals of numeric fields for records (in the use file) bearing the same <key>
UPDATE FROM <filename> ON <key> [ADD <field list>] or [REPLACE <field list>]	allows batch update of file in use by drawing upon information from designated FROM file
USE <file> [INDEX <file fist>]	opens a database file and (optionally) engages desired index files
WAIT [TO <memvar>]	suspends dBASE II operation until single console character is entered; optionally stores the latter to a designated <memvar>

Set Commands

The default value of each SET command of ON/OFF type is indicated by order of presentation: OFF/ON indicates default value of OFF: ON/OFF a default value of ON.

SET ALTERNATE TO <file>	creates designated file (type .TXT) for saving screen output to disk. Repeated without[<file>], closes .TXT file
SET ALTERNATE OFF/ON	ON sends screen output to disc file created with previous command; OFF shuts off output
SET BELL ON/OFF	ON rings bell when invalid data entered or field boundary passed; OFF turns off bell
SET CARRY OFF/ON	When using APPEND (full-screen), ON enters data from last record into present record; OFF turns off function
SET COLON ON/OFF	ON displays colons which delimit or bound input variables; OFF hides colons
SET CONFIRM OFF/ON	ON waits for <return> before skipping to next field in full-screen mode; OFF skips to next field as soon as present field is filled
SET CONSOLE ON/OFF	ON sends all output to screen; OFF suspends all output to screen
SET DATE TO <MM/DD/YY>	sets or resets system date
SET DEBUG OFF/ON	ON sends output from SET ECHO and STEP to print; OFF sends output to screen.
SET DEFAULT TO <drive>	commands dBASE II to regard specified drive as default drive for all future operations
SET DELETED OFF/ON	ON prevents dBASE II from reading/processing any record marked for deletion following a command which has <scope> as an option. OFF allows dBASE II to read all records
SET ECHO OFF/ON	ON allows monitoring of command file execution by echoing all commands to screen; OFF suppresses echo
SET EJECT ON/OFF	ON causes REPORT command to trigger a form-feed (page eject) before sending report to print; OFF disables the page eject
SET ESCAPE ON/OFF	ON enables user to abort command file execution by hitting ESCape key; OFF disables ESC key
SET EXACT OFF/ON	ON requires exact match in any comparison between two strings (e.g., in use of FOR <exp> or FIND command); OFF allows matches between strings of different lengths
SET FORMAT TO [<file>]	accesses specified file (type .FMT) containing custom made screen/print format for use in conjunction with APPEND, EDIT, INSERT, etc
SET FORMAT TO <SCREEN/PRINT>	directs output from format file to screen or printer
SET HEADING TO <cstring>	saves <cstring> internally and inserts it as REPORT header line. cstring limited to 60 chars
SET INDEX TO [<file list>]	sets up index files for use with corresponding database file. First listed .NDX file will be engaged as the active index; all other files will be automatically updated to reflect any changes to the database file
SET INTENSITY ON/OFF	ON enables inverse video or dual intensity during full-screen operations (if hardware permits); OFF disables these features
SET LINKAGE OFF/ON	ON enables simultaneous movement of record pointers in both Primary and Secondary work areas in response to commands which only permit downward movement through a file (i.e. commands with <scope>). OFF suspends pointer linkage
SET MARGIN TO <n>	sets left hand margin of printer to <n>
SET PRINT OFF/ON	ON directs output to printer; OFF cuts off output to printer
SET RAW OFF/ON	ON LISTs and DISPLAYs records without inserting spaces between fields; OFF inserts an extra space between fields
SET SCREEN ON/OFF	ON enables full-screen operation with APPEND, EDIT, CREATE, etc. OFF disables full-screen operation
SET STEP OFF/ON	ON aids debugging of command files by halting execution after performing each command; OFF disables STEP
SET TALK ON/OFF	ON displays results of commands on screen; OFF suppresses display of results

Structured Programming Commands

DO <file>	Accesses and executes a command file (type .PRG)
DO CASE CASE <exp1> <statements> CASE <exp2> <statements> CASE <expN> <statements> OTHERWISE <statements> ENDCASE	Permits choice of one and only one of several possible execution paths, i.e., CASE through CASE <expN>. When CASE evaluates as logically True, the following statements and commands will be performed OTHERWISE clause for alternate execution path is optional. DO CASE structure must be terminated with ENDCASE
DO WHILE <exp> <statements> LOOP <statements> ENDDO	Opens a structured command loop. The following commands and statements will be executed until evaluates as a logical False An optional portion of DO WHILE, LOOP causes command file to jump back and re-evaluate DO WHILE Structure must terminate with ENDDO

IF <exp>
    <statements>
ELSE
    <statements>
ENDIF
	Permits conditional execution of following statements and command.
	
	Optional ELSE provides an alternate path of execution. Structure must terminate with ENDIF

TEXT <any text> ENDTEXT	Allows the output of text information from a command file dBASE II will read everything as an ENDTEXT command