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Comparison of Terminologies for the SIL Implementation of SNOBOL4

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1. Introduction

The terminology and notation used in the SIL source program for SNOBOL4 developed over a period of years. As the internal structure of the implementation evolved, much of the original terminology became obsolete and inappropriate. Since existing source material and documentation was in use by implementors, changes in notation and terminology were not made.

When a book describing the SIL implementation was written, [1], new notation and terminology were used to make the description more uniform and understandable. As a result, persons implementing SIL have source material and documentation that uses different notation and terminology than this book. This report is a guide to correspondences between notation and terminology used in the book and those used in the actual source material and other documentation.

2. Terminology

A few terms used in the book are different from the actual ones. These are:

<i>actual term</i>	<i>book term</i>
address field	V field
flag field	F field
length field	L field
offset field	O field
specifier	qualifier
value field	T field

3. Macro Names

The names of many macros were changed in writing the book to provide more consistent mnemonics. The actual and book names for macros follow:

<i>actual name</i>	<i>book name</i>
ACOMP	CMPVV
ACOMPC	CMPVC
ADDLG	ADDLV
ADDSIB	APDSIB
ADDSON	APDSON
ADJUST	RELPTR
ADREAL	ADDRVV
AEQL	EQLVV
AEQLC	EQLVC
AEQLIC	EQLVIC
APDSP	APDQQ

ARRAY	DBLOCK
BKSIZE	COMSZ
BKSPCE	BKSPCE
BRANCH	BRANCH
BRANIC	BRANIN
BUFFER	BUFFER
CHKVAL	CMPPOS
CLERTB	CLEARLT
COPY	COPY
CPYPAT	CPYPAT
DATE	DATE
DECRA	DECVC
DEQL	EQLDD
DESCR	DESCR
DIVIDE	DIVVV
DVREAL	DIVRVV
END	END
ENDEX	TERMEX
ENFILE	ENFILE
EQU	EQU
EXPINT	EXPVV
EXREAL	EXPRVV
FORMAT	FORMAT
FSHRTN	DELQC
GETAC	GETVC
GETBAL	COMBAL
GETD	GETD
GETDC	GETDC
GETLG	MOVVL
GETLTH	COMNVZ
GETSIZ	GETIT
GETSPC	GETQC
INCRA	INCVC
INCRV	INCTC
INIT	INITEX
INSERT	INSNOD
INTRL	CVTRI
INTSPC	CVTSI
ISTACK	INITST
LCOMP	CMPLL
LEQLC	EQLLC
LEXCMP	CMPSS
LHERE	EQULOC
LINK	LINK
LINKOR	CONALT
LOAD	LOAD
LOCAPT	LOCAD
LOCAPV	LOCBD
LOCSP	COMQNV
LVALUE	COMMML
MAKNOD	MAKPAT
MNREAL	NEGRV
MNSINT	NEGV
MOVA	MOVVV

MOVBLK	CPYBLK
MOVD	MOVDD
MOVEDC	TRANDC
MOVV	MOVTT
MPREAL	MPYRVV
MSTIME	TIME
MULT	MPYVV
MULTC	MPYVC
ORDVST	ORDNVT
OUTPUT	OUTPUT
PLUGTB	SETUPT
POP	POPD
PROC	PROC
PSTACK	STKPTR
PUSH	PUSHD
PUTAC	PUTVC
PUTD	PUTD
PUTDC	PUTDC
PUTLG	MOVLV
PUTSPC	PUTQC
PUTVC	PUTTC
RCALL	RCALL
RCOMP	CMPRVV
REALST	CVTSR
REMSP	COMSQ
RESETF	CLRF
REWIND	REWIND
RLINT	CVTIR
RPLACE	RPLACE
RRETURN	RRETURN
RSETFI	CLRFI
SBREAL	SUBRVV
SELBRA	BRANLV
SETAC	MOVVC
SETAV	MOVVT
SETF	ADDF
SETFI	ADDFI
SETLC	MOVLC
SETSIZ	PUTIT
SETSP	MOVQQ
SETVA	MOVTV
SETVC	MOVTC
SHORTN	DECLC
SPCINT	CVTIS
SPEC	QUAL
SPOP	POPQ
SPREAL	CVTRS
SPUSH	PUSHQ
STPRNT	PRINTQ
STREAD	READQ
STREAM	STREAM
STRING	STRING
SUBSP	SUBQQ
SUBRTT	SUBVV

SUM	ADDVV
TESTF	TESTF
TESTFI	TESTFI
TITLE	TITLE
TOP	LOCTTL
TRIMSP	TRIMQQ
UNLOAD	UNLOAD
VARID	HASH
VCMPIC	CMPTIC
VEQL	EQLTT
VEQLC	EQLTC
ZERBLK	CLRBLK

4. Syntax Tables

A list of actual and book names for the syntax tables follows:

<i>actual name</i>	<i>book name</i>
BIOPTB	BINOPS
CARDB	CRDTYP
DQLITB	DQLIT
ELEMTB	ELEMNT
EOSTB	STMEND
FLITB	REAL
FRWDTB	FORWRD
GOTFTB	FGOTO
GOTOTB	GOTO
GOTSTB	SGOTO
IBLKTB	INITBL
INTGTB	INTGER
LBLTB	LABEL
LBLXTB	LABELR
NBLKTB	NBLANK
NUMBTB	APROTO
NUMCTB	APROTT
SNABTB	MATCH
SQLITB	SQLIT
STARTB	STARS
TBLKTB	TBLANK
UNOPTB	UNOPS
VARATB	FPROTO
VARBTB	FPROTT
VARTB	IDENTF

5. Machine-Dependent Symbols

The book names of the machine-dependent symbols required to implement SIL are different from the actual ones in some cases. All changes are in the copy segment PARMS; the symbols in MDATA remain the same. A list of the actual and book names follows:

<i>actual name</i>	<i>book name</i>
DESCR	DWDTH
FNC	FFLG
MARK	MFLG
PTR	AFLG
SIZLIM	SIZLIM
SPEC	QWDTH
STTL	SFLG
TTL	TFLG

In addition, a new flag, VFLG, is introduced in the book. VFLG may be considered to have the same definition as FFLG, since there is no conflict in their use. The interpreter stack, which is referenced in some macro definitions, is now SYSSTK instead of STACK.

Reference

1. Griswold, R. E. *The Macro Implementation of SNOBOL4: A Case Study of Machine-Independent Software Development*. W. H. Freeman and Company, San Francisco, California. 1972.