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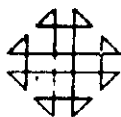


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CONTRIBUTED PROGRAM LIBRARY SUBMITTAL FORM
(for IBM S/360, 1130 and 1800)

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This form should be completed and submitted with the program package to PID at the address shown above. Standards and instructions for submitting programs are in your *User Group Reference Manual* or the *Contributed Program Submittal Standards Manual* available from PID.

- ① Program Order Number (to be filled in by PID) 360D-06.7.022
- ② System Type (machine) S / 3 6 0
- ③ Search Key Q U I C K / I N D E X E R / / F O R /
K W I C I N D E X I N G
- ④ Programming Language 3 6 0 O S P L 1 L F
- ⑤ Author's Name and Address John A. Starkweather
Richard Karpinski
- ⑥ Direct Inquiries to Name and Address (if different than Author) Richard Karpinski
~~INFORMATION SYSTEMS~~ - 76 U
University of California
San Francisco, California 94143
- ⑦ Title of Program OS/360 QUIC (KWIC INDEXING)
- ⑧ Submitter's User Group Affiliation Code and Installation Code S U C S
- ⑨ Submitter's Own Program Identification and Suffix (optional) V E R 2
- ⑩ Primary Subject Code 0 6 . 7
- ⑪ Secondary Subject Codes 0 0 . 0 0 6 . 1 0 6 . 6 0 3 . 5
- ⑫ Operating or Monitor System Required O S - 3 6 0 P L / I - V 4
- ⑬ New or Revision Code (if revision, show prior Program Order Number in item 1) R
- ⑭ Year Completed 6 8
- ⑮ Date of Submittal 1 2 3 1 6 8
- ⑯ Documentation (number of original pages submitted) 2 3
- ⑰ Abstract (should contain sufficient information for a reader to determine the value of the program). Listed on the reverse side of this form are subjects which may serve as a guide for a descriptive abstract.

CONTRIBUTED PROGRAM LIBRARY SUBMITTAL FORM

Subject Guide

- Purpose
- Programming Language used
- Version and modification level or release number of IBM Programming System used, or program order number for non-IBM authored program used
- Field of application
- Type of routine (main program, subroutine, etc.)
- Specific description of machine requirements
- Engineering Changes (EC) level of equipment (if pertinent)

ABSTRACT

QUIC produces KWIC indexes for a variety of purposes. Many options permit modifying various aspects of the process and results. The program is run as a three step job: INPUT-[PL/I], SORT-[OS/360 SORT-MERGE], OUTPUT-[PL/I]. Approximately 100K bytes are used but the program requires no special equipment.

PROGRAMMING SYSTEMS-Written in PL/I P for OS/360.

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(Please attach additional pages if necessary)

Total pages attached _____

Permission to Publish

"I hereby give anyone permission to reprint, reproduce, and distribute this program to anyone else."

(18) Signature of Submitter and Date Richard H. Karpinski 3-21-69
(19) Signature of Installation Addressee Joseph B. Yeaton

TP43P

TABLE OF CONTENTS

Deck Key.....	4
Identification.....	5
Author.....	5
Purpose.....	5
Applications.....	7
Input Format.....	7
Output Format.....	9
Input Listing.....	10
Method of Indexing.....	10
Sections.....	11
Options.....	11
Description of Distribution Deck.....	18
Setup of Distribution Deck.....	18
Running QUIC with Object Decks.....	20
Running QUIC with a PROCLIB Procedure and Object Library.....	21
Sample Input.....	22
Sample Output.....	23

Distribution Deck Key (See also writeup-page 14)

Columns 73-80	
1267 cards	QUIC 1 through QUIC1267
52 cards	Unnumbered (sample input)
(See writeup-page 18 for listing)	
191 cards	QUIC1268 through QUIC1458

UCS-QUIC

Written in PL/I for IBM360-G5

IDENTIFICATION:

UCS-QUIC - QUICK INDEX COMPILER

Author: John A. Starkweather
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University of California
San Francisco Medical Center
San Francisco, California 94122
Telephone: (415) 666-2012

Date: December, 1968

PURPOSE:

UCS QUIC is a PL/I program which produces keyword indexes. The program is designed to operate in a "G" level (128K) or greater IBM-360 using the "QS" operating system.

The program reads "text" (book titles, authors names, abstracts, etc.) from cards into the machine, removes all multiple occurrences of spaces, and then proceeds word by word, producing permuted lines of text with each keyword as the center word of a line. It is possible when reading the index to see part of the context in which the keyword was used, thereby reducing the time necessary to find the material you are looking for.

Assume the machine read in the following line:

NOW IS THE TIME.

The program would produce the following lines of permuted text:

TIME.# NOW IS THE
NOW IS THE TIME.#
NOW IS THE TIME.#
THE TIME.# NOW IS

In the above example the symbol "#" is appended by QUIC to indicate the actual end of the input text. As you can see from the example above, if the input text is very long, it is not possible to see the entire input text with every keyword. If this should occur, QUIC will insert the symbol "/" to indicate that there was insufficient space to show the entire input text.

There are more than 20 options that you may use which will allow you to specify:

1. A list of words which are the only words to be used as keywords. (GO WORDS)
2. A list of words which are not to be used as keywords. (STOP WORDS)

NOTE: QUIC makes heavy usage of defaults... (options to be used in the case that the user does not specify one of the alternatives)... thus if neither STOP WORDS nor GO WORDS are specified, all words in the input text will be treated as keywords.

3. A formatted listing of the input (usually a bibliography) is to be made (PRINT BIBLIOGRAPHY). Order of items remains the same as in the input.
4. Specific card types which may be indexed into a separate listing from that of the main section (note: card type 2 is automatically indexed into (INDEX CARD TYPE 'X' INTO SECTION 'Y') or that they are to be indexed into both the main section and separate sections (INDEX CARD TYPE 'X' INTO SECTIONS 'JABC') or that they are to be indexed into just the main section (INDEX CARD TYPE 'X'). Up to 256 separate output sections may be used.
5. Redefinition of a standard set of break characters (characters that define the starting and stopping place of words - e.g. comma, period, blank, etc.). (BREAK CHARACTERS)
6. Authors' names (card type 1) are to be indexed with the main index (INDEX AUTHORS) or indexed into a special index section ahead (INDEX AUTHORS SEPARATELY) or behind (INDEX AUTHORS INTO SECTION 'Q') the main index section. (Also see AUTHOR INPUT).
7. Page numbering for all of the index sections consecutively as one unit, or have the sections page numbered individually. (PRINT INDEX SEPARATELY).
8. More than one copy to be printed of the index or of the input listing (Bibliography) (separate copy counters are maintained for each of them). (PRINT BIBLIOGRAPHY COPIES 6). (PRINT INDEX COPIES 3).
9. That certain card types be indexed, but not printed, in the bibliography and vice-versa (you could have them used in both or neither if you wished to do so). (PRINT BIBLIOGRAPHY IGNORING 'X,Y,Z').
10. Up to 256 different card types.

APPLICATIONS:

Some of the applications might be keyword indexing of the following:

- Article abstracts and their authors.
- Document descriptions and their associated file numbers.
- Mailing lists.
- Cataloging (bibliographies, parts catalogs, ...).
- Text editing.
- Indexing technical specification documents (index entire document...index would be made on every keyword and the content in which it was used).
- Personnel files (individual interests or skills).

I. INPUT FORMAT

COLUMNS	INPUT TEXT	USAGE
1-60		Continuation of the same card type (column 73) considers column 1 of a second card to be adjacent to column 60 of the first. No blank is inserted. Multiple blanks, however, are reduced to one during indexing.
		Card type 1, normally used for author names, has a special feature for multiple authors. Start the first author's name (last name first) in column 1, leave columns 17 and 18 blank, and start the second author's name in column 19. For more authors, repeat the procedure on continuation cards. If either of columns 17 or 18 are non-blank, the entire area 1-60 will be considered as a single author name.

61-72	REFERENCE INFORMATION	The 12 columns may contain any form of reference information to be printed to the right of all lines of rotated text, as well as appearing to the right of the bibliography print. A suggested usage of these 12 columns would be to refer to the physical location of the reference document; such as periodical name, date, page numbers and perhaps shelf location, but this space need not be used at all.
-------	-----------------------	--

INPUT FORMAT

COLUMNS

73	CARD CODE	USAGE This column is used to indicate the card type. Card type 1 is an author card. Card type 2 is a title card. A suggested usage for other card types might be: 3 - Source information (where item found). 4 - Abstract. 5 - Descriptive items. It should be noted that normally only the type 1-Author and type 2-Title are rotated into the index. Therefore, the card types other than 1 and 2 would normally only be printed in the bibliography. (Note the use of the word <u>normally</u> ; it is possible to rotate any card type, as will be seen later). It should also be noted that the card code may be any character. This is a two digit number used to keep the cards within a card type in proper order. The number should start with "01" and be incremented by 1. (See also 'IGNORE' option under 'PRINT BIBLIOGRAPHY' and 'PRINT INDEX' commands). This is a 5 character field which may contain reference information. This information will be printed at the left of each bibliography item and at the left of all index lines. (The standard usage of this field at UCS has been to number sequentially each item of data, place this number in columns 76-80, and use it as a document reference to point to the formatted input listing where the full item (not just the rotated card(s)) can be seen).
74-75	SEQUENCE NUMBER	
76-80	DOCUMENT REFERENCE	Note: Both REFERENCE INFORMATION and DOCUMENT REFERENCE act as identification of the bibliography item. A change in either of these fields (61-72 or 76-80) will start a new and separate bibliography item.

II. OUTPUT FORMAT

This section will describe the output formats of both the index and its internal sections and the formatted input listing.

INDEX

Example:

2258 IS PRODUCED BY SPHENOID SINUS ABSCESS: WITH NEUROKADICAL JNL-OC67-10
 2258 ADIOLGIC REVIEW OF PITUITARY ABSCESS# /ABCESS: WITH NEU JNL-OC67-10
 2259 ALTER, M JNL-OC67-35
 2255 'AND' NOT INDEXED
 2260 ADMINISTRATION OF AUTOLOGOUS BLOOD IN CATS# /BROVENTRIC NEU-OC67-993

col.1 (document reference)	col.7 indexed word	reference information
↑	↑	↑
2258	IS PRODUCED BY SPHENOID SINUS ABSCESS: WITH NEUROKADICAL	JNL-OC67-10
2258	ADIOLGIC REVIEW OF PITUITARY ABSCESS# /ABCESS: WITH NEU	JNL-OC67-10
2259	ALTER, M	JNL-OC67-35
2255	'AND' NOT INDEXED	
2260	ADMINISTRATION OF AUTOLOGOUS BLOOD IN CATS# /BROVENTRIC	NEU-OC67-993

COLUMNS

1-5 DOCUMENT REFERENCE (reproduced from columns 76-80 of the input)
 6 Blank
 7 Start of the indexed line
 ((N/2)-3) Start of the indexed word
 (N-14) End of indexed line
 (N-13) Blank
 (N-12) Start of reference information (reproduced from columns 61-72 of the input)

NOTE:

N is equal to 80 unless changed by the 'LENGTH' control option.

INPUT LISTING

Example:

2259 LEIBOWITZ, U HALPERN, L NEU-OC67-988
 ALTER, M
 CLINICAL STUDIES OF MULTIPLE SCLEROSIS IN ISRAEL: 5.
 PROGRESSIVE SPINAL SYNDROMES AND MULTIPLE SCLEROSIS
 NEUROLOGY, OCTOBER, 1967, 17, 988-992

2260 CARPENTER, S J MC CARTHY, L E NEU-OC67-993
 BORISON, H L
 MORPHOLOGIC AND FUNCTIONAL EFFECTS OF INTRACEREBROVENT
 RICULAR ADMINISTRATION OF AUTOLOGOUS BLOOD IN CATS
 NEUROLOGY, OCTOBER, 1967, 17, 993-1002

col. LISTING OF COLUMNS 1-60 of input cards. columns 61-72
 76-80

COLUMNS

1-5 DOCUMENT REFERENCE (reproduced from columns 76-80 of the input)
 6 BLANK
 7-66 INPUT TEXT (reproduced from columns 1-60 of the input)
 67-68 BLANK
 69-80 REFERENCE INFORMATION (reproduced from columns 61-72 of the input)

NOTE:

The usage of the 'LENGTH' option has no effect on the bibliography, if the length is greater than 80. If the length is less than 80, truncation will occur on the right. (For example, if the length is set to 67 or 68 the reference information will not be printed on the bibliography. Reference information will appear on the index print, however, regardless of the value of 'LENGTH').

METHOD OF INDEXING

As each card is read, QUIC will first check to see if that card type is to be indexed. If the card passes this test, QUIC will then check to see if this particular card sequence number is to be ignored.

If this card is not to be ignored, then QUIC will first remove all multiple occurrences of blanks, leaving in their place just one blank.

"Words" are considered to be character strings preceded and followed by blank, period, apostrophe, hyphen, left and right parentheses, semi-colon, colon, question-mark, and double quote mark unless this series of characters has been changed by the use of the 'BREAK CHARACTER' option.

Each "word" found in this manner will be checked against a list of 'STOP WORDS' to see if an index line should be produced. If a comparison between the "word" and a word in the stop word list should result in an equal comparison then no index line will be produced.

If the 'GO WORD' option has been used then only the "words" that are in this list will be used to form index lines.

If neither 'GO WORDS' nor 'STOP WORDS' are used then all "words" found in the input text will form index lines.

SECTIONS

The main section of the output is labelled with the capital I. This leaves the user with the versatility of placing sections before the main section (A-H) or after the main section (J-Z). Section labels are limited to one character, but section labels are limited to one character, but the 360 allows 256 different characters.

III. OPTIONS

The use of single quotes in some of the following options is required. The option examples should make clear which options have this requirement.

Except for the 'TITLE' option, all other options have default assumptions. The sequence of options is unimportant except for the option 'STOP WORDS' or 'GO WORDS' and the associated list, which must immediately precede the 'TITLE' option. All options appear one per card, and may start anywhere on the card, except again the 'TITLE' option, which has a special format.

If, for some reason, there should be insufficient space on a card for a complete option, you should break the option into smaller sections and repeat the option control word and supply the additional information. This may be continued for as many cards as needed.

Example:

```
INDEX CARD TYPE '1'
INDEX CARD TYPE '2'
INDEX CARD TYPE '3'
```

is equivalent to:

```
INDEX CARD TYPE '1,2,3'
```

In the option descriptions that follow, you will note an entry of "required". This describes the keyword(s) that QUIC requires in order to recognize an option. Under normal conditions there is no problem with extra words on the card with the option control word. However, in the case where the option variable is a number not enclosed in quotes, there must be no other words separated by blanks or commas between the option keyword and the numeric value (i.e. there should be at least one blank between the keyword and the number but nothing else).

Example:

The option PAGESIZE is recognized by QUIC by the character sequence PAGE. Therefore:

```
PAGE 60
PAGESIZE 60
PAGELENGTH 60
PAGESIZEORLENGTH 60
PAGEABCDEFGHIJ 60
SET THE PAGESIZE 60
MAKE PAGESIZE 60 LINES LONG
```

all are legal variations which set the length of each page to 60 lines.

The variations:

```
PAGE SIZE 60
SET PAGE SIZE TO 60
SET PAGESIZE TO 60
```

are all illegal options because of the extra word between PAGE and the variable 60.

```
OPTION:      LENGTH n
REQUIRED:    LENGTH n
EXAMPLE:     LENGTH 100
PURPOSE:     Sets the output line length to the integer value inserted in place of "n". The example would set the line length to 100 characters wide.
```

RESTRICTIONS:

"n" must be in the range of 20-132.

If n is less than 20, then n will be set to 80.

If n is greater than 132, then n will be set to 132.

n = 80.

DEFAULT:

OPTION:
REQUIRED:
EXAMPLE:
PURPOSE:
RESTRICTIONS:
DEFAULT:

PAGESIZE n
PAGE n
MAKE PAGESIZE 30 LINES LONG
"n" is the number of lines to be printed on each page.
The example would print 30 lines to a page.
If "n" is less than 1, then "n" will be set to 60.
If "n" is greater than 32, 767, then "n" will be set to 60.
n = 60.

TAPE
TAPE
INPUT FROM TAPE
Instructs QUCIC that the input data following the 'TITLE' option will be from a file called "TAPE" instead of the customary "SYSIN".
None.
Input will be from file 'SYSIN' (normally the card reader).

OPTION:
REQUIRED:
EXAMPLE:
PURPOSE:

STOP WORDS
STOP WORDS FOLLOW
Allows a list of words to be specified that are not to be used to produce index lines. If a word appears in the input text stream that is also in the stop word list, a message will be generated once, and only once, saying "xxxx" NOT INDEXED. Words in the list must appear, one word per card, starting in column 1. Only the first 10 characters are actually used in the comparison process. The end of the list is indicated with the keyword option 'TITLE'.

RESTRICTIONS:

1) May not be used if 'GO WORDS' option is in use.
2) Maximum of 500 words in the list.
3) A word with the first 5 characters "TITLE" may not be included in the list.
If option 'GO WORDS' is not in use, then all words will create indexed lines.

DEFAULT:

OPTION:
REQUIRED:
EXAMPLE:
PURPOSE:

TITLES
TITLE
TITLE
SAMPLE QUCIC RUN
Notify QUCIC that the input text follows immediately. (If 'TAPE' option is in use, then QUCIC will try to get input from file "TAPE"). Any information starting in column 11 will be used as a page heading for both the bibliography and the index print.
'TITLE' must start in column 1.

RESTRICTIONS:
DEFAULT:

If accidentally omitted, QUCIC will attempt to use the first card that does not have an option control word on it as either the start of the 'STOP WORD' list or as input text... whichever seems more appropriate, according to its format.

OPTION:
REQUIRED:
EXAMPLE:

BREAK CHARACTERS 'XXXXXXXX...XXXX'
BREAK 'XXXX...XX'
SET THE BREAK CHARACTERS TO '.,:;()'.
To change the standard set of word-defining characters (i.e. characters which define the limits of words in character strings). The new set of characters must be enclosed in single quotes, and if a single quote is desired, it must be represented as a pair of adjacent single quotes. In the example above a blank, single quote, period, comma, colon, semi-colon, double-quote, right and left parentheses will be used as the break characters.
The character ' must be represented as ''.
(Note: The two single quotes '' are not the same as the double quote character").
Blank, period, apostrophe ', hyphen, left and right parentheses, semi-colon, colon, question-mark and double quote will be used as break characters.

RESTRICTIONS:

DEFAULT:

OPTION:
REQUIRED:
EXAMPLE:
PURPOSE:
RESTRICTIONS:
DEFAULT:

INDEX AUTHORS
INDEX AUT
PLEASE INDEX THE AUTHORS
CAUSES AUTHORS (card type-1) to be indexed into index section I (main section).
None.
Authors are not indexed automatically.

The option INDEX AUTHORS has two additional sub-options.

AUTHOR:
SUB-OPTION:
REQUIRED:
EXAMPLE:
PURPOSE:
RESTRICTIONS:
DEFAULTS:

SEPARATELY
SEP
INDEX AUT SEPARATE
Equivalent to: "INDEX AUT SEC 'A' "
None.
Authors are not indexed automatically.

AUTHOR:
SUB-OPTION:
REQUIRED:
EXAMPLE:
PURPOSE:

SECTION 'X,X,...X'
SEC 'X,X,...X'
INDEX AUTHORS INTO SECTION 'A,I,'
Allows authors (card type-1) to be indexed into the output section(s) that are listed. The example will cause the authors to be indexed into both section 'A' and section 'I'.

RESTRICTIONS:
DEFAULT:

None.
Section 'I' will be used if "index authors" command used; otherwise authors will not be indexed.

OPTION: INDEX CARD TYPE 'X,X,X,X ... X'
 REQUIRED: INDEX TYPE 'A,X,X,X ... X'
 EXAMPLE: INDEX CARD TYPE '3,4'
 PURPOSE: Allows indexing of card types in addition to type 2.
 RESTRICTIONS: None.
 DEFAULT: CARD TYPE '2' will be the only card type indexed.

INDEX TYPE: SECTIONS 'X,X,X,X ... X'
 SUB-OPTION: SEC 'X,Y,Z, ... X'
 REQUIRED: INDEX CARD TYPE '3,4,5' INTO SECTIONS 'A,I,AIJ'
 EXAMPLE: CARD TYPE '3' in the example will be indexed into section 'I', type 'A', card type '4' will be indexed into section 'I', type '5' will be indexed into sections 'A,I,J'. The end result (assuming that the only other option used was 'INDEX AUTHORS SEPARATELY') would be that section 'A' would have the authors' names and permuted text from card types '3' and '5'; section 'I' would have text from card types '2,4,5'; and section 'J' would only have text from card type '5'. It should be noted that the command INDEX TYPE '3,4,5' SEC 'A,I,AIJ' is exactly equivalent to the sequence of:
 INDEX TYPE '3' SEC 'A'
 INDEX TYPE '4' SEC 'I'
 INDEX TYPE '5' SEC 'A'
 INDEX TYPE '5' SEC 'I'
 INDEX TYPE '5' SEC 'J'
 RESTRICTIONS: None.
 DEFAULTS: None.

OPTION: PRINT BIBLIOGRAPHY
 REQUIRED: PRINT BIB
 EXAMPLE: PRINT BIBLIOGRAPHY
 PURPOSE: All input cards will be printed in a special format (see formatted input listing/bibliography).
 RESTRICTIONS: None.
 DEFAULT: Bibliography will not be printed.

The 3 following sub-options may also appear in any order on the PRINT BIBLIOGRAPHY control card:

BIBLIOGRAPHY:
 SUB-OPTION: ONLY
 REQUIRED: ONLY
 EXAMPLE: PRINT BIBLIOGRAPHY ONLY
 PURPOSE: Prevent index from being produced and printed.
 RESTRICTIONS: None.
 DEFAULT: Index will automatically be printed.

The 3 following sub-options may also appear in any order on the PRINT BIBLIOGRAPHY control card:

BIBLIOGRAPHY:
 SUB-OPTION: ONLY
 REQUIRED: ONLY
 EXAMPLE: PRINT BIBLIOGRAPHY ONLY
 PURPOSE: Prevent index from being produced and printed.
 RESTRICTIONS: None.
 DEFAULT: Index will automatically be printed.

BIBLIOGRAPHY:
 SUB-OPTION: COPIES n
 REQUIRED: COP n
 EXAMPLE: PRINT BIB COPY 4
 PURPOSE: Allow printing of more than 1 copy of the bibliography.
 RESTRICTIONS: None.
 DEFAULT: Only 1 copy will be printed, if the 'PRINT BIB' command is used.

BIBLIOGRAPHY:
 SUB-OPTION: IGNORING 'X,Y,Z, ...'
 REQUIRED: IGN 'X,Y,Z, ...'
 EXAMPLE: PRINT BIBLIOGRAPHY IGNORING '2,301,302'
 PURPOSE: To prevent printing of card types 'X' and the 'ZZ' sequence number of the card type 'Y'. In the example given all cards will be printed in the bibliography except those with a '2' in column 72 (card type) and any card with '301' or '302' in columns 72-74 (card type and sequence number).
 RESTRICTIONS: None.
 DEFAULT: All cards read as input will be listed.

OPTION: PRINT INDEX
 REQUIRED: PRINT INDEX
 EXAMPLE: PRINT INDEX
 PURPOSE: The index will be printed.
 RESTRICTIONS: None.
 DEFAULT: The index will be printed.

The PRINT INDEX option may have any or all of the following sub-options in any order:

INDEX:
 SUB-OPTION: SEPARATELY
 REQUIRED: SEP
 EXAMPLE: PRINT INDEX WITH SEPARATE SECTIONS
 PURPOSE: To control page numbering in the output INDEX sections. If this option is used, each new section will be page numbered consecutively from page 1.
 RESTRICTIONS: None.
 DEFAULT: The entire index will be numbered consecutively from page 1 regardless of the number of sections.

DESCRIPTION OF DISTRIBUTION DECK

THIS PRINTOUT COMES FROM THE FIRST SECTION OF THE DISTRIBUTED DECK. IT DESCRIBES THE DECK SETUPS FOR RUNNING QUIT UNDER VARIOUS METHODS.

THE DECK CONSTITUTES AN EIGHT STEP JOB INCLUDING A FULL SET OF JCL CARDS (WHICH PRESUME THAT THERE IS A 2314 ON THE SYSTEM).

STEP 1: PRINTS THIS DESCRIPTION FROM CARDS. THE JCL CARDS LISTED ARE USABLE AS IS EXCEPT FOR /* CARDS.

STEPS 2,3,4: PL/I COMPILE, LINK-EDIT, AND GO OF QUIT WHICH ACCEPTS THE INPUT. (SAMPLE INPUT IS PROVIDED.)

STEP 5: OS SORT/MERGE

STEPS 6,7,8: PL/I COMPILE, LINK-EDIT, AND GO OF QUIT2 WHICH PRINTS THE OUTPUT.

SECTION OF DISTRIBUTION DECK

```
//CDPRT EXEC PGM=IEBPTCH
//SYSOUT DD SYSOUT=A
//SYSIN DD DISP=OLD,DSNAME=SYS1.PROCLIB(CDPRTA)
//SYSUT2 DD SYSOUT=A
//SYSUT1 DD DATA

/* NOTE: THIS SHOULD BE A /* CARD FOR RUNNING
//PLIL EXEC PGM=IEBMAA.PARM=,DECK
//SYSOUT DD SYSOUT=A
//SYSIN DD DISP=OLD,DSNAME=SYS1.PROCLIB(CDPRTA),SPACE=(CYL,(3,3))
//SYSUT3 DD UNIT=SYSDA,SPACE=(CYL,(1,1)),REF=SYSPRINT
//SYSUT1 DD UNIT=SYSDA,SPACE=(CYL,(3,3))
//SYSPLNCH DD UNIT=SYSCP
//PLIL,SYSCN DD *

/* NOTE: THIS SHOULD BE A /* CARD FOR RUNNING
//PLIL EXEC PGM=IEBMAA.PARM=,DECK
//SYSOUT DD SYSOUT=A
//SYSIN DD DISP=OLD,DSNAME=SYS1.PROCLIB(CDPRTA),SPACE=(CYL,(3,3))
//SYSUT3 DD UNIT=SYSDA,SPACE=(CYL,(1,1)),REF=SYSPRINT
//SYSUT1 DD UNIT=SYSDA,SPACE=(CYL,(3,3))
//SYSPLNCH DD UNIT=SYSCP
//PLIL,SYSCN DD *

/* NOTE: THIS SHOULD BE A /* CARD FOR RUNNING
//LKCL EXEC PGM=IEBMAA.PARM=,DECK
//SYSOUT DD SYSOUT=A
//SYSIN DD DISP=OLD,DSNAME=SYS1.PROCLIB(CDPRTA),SPACE=(CYL,(3,3))
//SYSUT3 DD UNIT=SYSDA,SPACE=(CYL,(1,1)),REF=SYSPRINT
//SYSUT1 DD UNIT=SYSDA,SPACE=(CYL,(3,3))
//SYSPLNCH DD UNIT=SYSCP
//PLIL,SYSCN DD *

/* NOTE: THIS SHOULD BE A /* CARD FOR RUNNING
//LKCL EXEC PGM=IEBMAA.PARM=,DECK
//SYSOUT DD SYSOUT=A
//SYSIN DD DISP=OLD,DSNAME=SYS1.PROCLIB(CDPRTA),SPACE=(CYL,(3,3))
//SYSUT3 DD UNIT=SYSDA,SPACE=(CYL,(1,1)),REF=SYSPRINT
//SYSUT1 DD UNIT=SYSDA,SPACE=(CYL,(3,3))
//SYSPLNCH DD UNIT=SYSCP
//PLIL,SYSCN DD *
```

18

INDEX: SUB-OPTION: COPIES n
REQUIRED: COP n
EXAMPLE: PRINT INDEX COPIES 12
PURPOSE: Allow printing of more than 1 copy of the index section(s).
RESTRICTIONS: None.
DEFAULT: 1 copy of the index will be printed.

INDEX: SUB-OPTION: IGN 'X,YZZ, ...'
REQUIRED: IGN 'X,YZZ, ...'
EXAMPLE: PRINT INDEX IGNORING '2,305'
PURPOSE: Prevent the indexing (in the above example) or card type '2' (which is normally automatically indexed) and prevent the indexing of any card with '305' in columns 72-74 (card type and sequence number). (See also IGNORING command in 'PRINT BIBLIOGRAPHY').

RESTRICTIONS: None.
DEFAULTS: All cards that are referenced by 'INDEX TYPE 'X'' and card type '2' will be indexed.

17

```

//OUTPUT DD UNIT=SYSDA,DISP=(,PASS),SPACE=(TRK,(300,300)),
//      DCB=(RECFM=F,INCL=1,C=134,LRECL=134,VOLUME=600,SYNOO)
//      INDEXED CC UNIT=SYSDA,DISP=(,PASS),SPACE=(TRK,(300,300)),
//      DCB=(RECFM=F,INCL=1,C=134,LRECL=134)
//      INPUT DD UNIT=SYSDA,DISP=(,PASS),SPACE=(TRK,(300,300)),
//      DCB=(RECFM=F,ALKSIZE=134,LRECL=134)
//GO.SYSIN DD *
(QUIC INPUT DATA CODE HERE.)

** NOTE: THIS SHOULD BE A /* CARD FOR RUNNING
//SORT EXEC PGM=ISORT,PARM=(CDE=190000)
//SYSOUT DD SYSOUT=A
//SYSPRINT DD DUMMY
//SYSLINK DD UNIT=SYSDA,SPACE=(134,120,11)
//SYSLIN DD UNIT=SYSDA,SPACE=(10,1150,10)
//SORTLIB CC CSNAME=SYSL,COEXLTA,DISP=OLD
//ASVSUT DD UNIT=SYSDA,SPACE=(1074,(50,20))
//SORTIN DD DISP=(OLD,DELETE),CSNAME=*CO,INPUT
//SORTOUT CC DISP=(NEW,PASS),DSNAME=*CO,INDEXED
//SORTWK01 CC UNIT=SYSDA,SPACE=(TRK,(300),CONTIG)
//SORTWK02 CC UNIT=SYSDA,SPACE=(TRK,(300),CONTIG)
//SORTWK03 CC UNIT=SYSDA,SPACE=(TRK,(300),CONTIG)
//SORTWK04 CC UNIT=SYSDA,SPACE=(TRK,(300),CONTIG)
//SORTWK05 CC UNIT=SYSDA,SPACE=(TRK,(300),CONTIG)
//SORTWK06 CC UNIT=SYSDA,SPACE=(TRK,(300),CONTIG)
//SYSIN DD *
SORT FIELDS=(21,CH,A,65,20,C,H,A1,SIZE=E10000)

** NOTE: THIS SHOULD BE A /* CARD FOR RUNNING
//PLIL EXEC PGM=JEMMA,PARM=DECK
//SYSPRINT DD SYSOUT=A
//SYSLIN DD DISP=(NEW,PASS),UNIT=2314,DSNAME=ELDASET,SPACE=(CYL,(3,3))
//SYSUT DD UNIT=SYSCC,SPACE=(CYL,(1,1)),REP=SYSPRINT
//ASVSU1 DD UNIT=SYSDA,SPACE=(CYL,(3,3))
//SYSPUNCH OF UNIT=SYSCC
//SYSIN DD *
(SOURCE DECK FOR QUIC CODES HERE.)

** NOTE: THIS SHOULD BE A /* CARD FOR RUNNING
//LK02 EXEC PGM=PLI,COND=(F,LT,PLI)
//SYSLIB DD DISP=OLD,DSNAME=SYSL,PLI18
//SYSLMOD CC CSNAME=RCEST2(CO),DISP=(NEW,PASS),UNIT=SYSC0,
//      SPACE=(1024,(50,20))
//ASVSU1 DD UNIT=2314,SPACE=(CYL,(4,4))
//SYSPRINT DD SYSOUT=A
//SYSLIN DD CSNAME=*PLI,SYSLIN,DISP=(OLD,DELETE),
//      DCB=(RECFM=F,ALKSIZ=80)
//      CC CSNAME=SYSL
//      EXEC PGM=*LK02,CYL REC,COND=(19,LT,LK02),(11,LT,PLI11)
//SYSPRINT DD SYSOUT=A
//PRINTER DD SYSL='A',DCB=(BLKSIZE=133,RECFM=HA)
//OUTPUT DD DISP=(OLD,DELETE),CSNAME=*CO,OUTPUT
//INDEXED CC DISP=(OLD,DELETE),DSNAME=*CO,INDEXED

```

```

RUNNING QUITC WITH OBJECT DECKS

DIFFICULTIES WILL BE ENCOUNTERED IF YOU TRY TO RUN FROM OBJECT DECKS
USING THE USUAL "OPERNAME PLILIB" TRICE IN THE SAME JOB.
THEREFORE SAMPLE JCL TO RUN FROM OBJECT DECKS IS PROVIDED BELOW.

//LKCI EXEC PGM=TFWL
//SYSLIB DD DISP=CLD,DNAME=CVEL,PLILIB
//SYSWMCD CC CSNAME=GGOST1(GCI),DISP=(NEW,PASS),UNIT=SYSNA,
// SPACE=41024,(150,20,11)
// //SYVSUTL DD UNIT=2314,SPACE=(CYL,(4,4))
//SYSPRINT DD SYSOUT=A
//SYSLIN DD *
      (OBJECT DECK FOR QUITC GOES HERE.)
** NOTE: THIS SHOULD BE A /* CARD FOR RUNNING
//GO EXEC PGM=LKCI,SYSLMOD,COND=(9,LT,LK01)
//SYSCONT DD SYSOUT=A
//OUTPUT DD UNIT=SYSNDA,DISP=(,PASS),SPACE=(TRK,(300,20,11)),
// DC=RECFM=F,RLSIZE=134,LRFL=134,VOL=SEF=SYSNOO
//INCEVED CC UNIT=SYSNDA,DISP=(,PASS),SPACE=(TRK,(300,20,11)),
// DC=RECFM=F,LRFL=134,RLKSIZ=134
//INPUT DD UNIT=SYSNDA,DISP=(,PASS),SPACE=(TRK,(300,20,11)),
// DC=RECFM=F,RLSIZE=134,LRFL=134
//SYSLIN DD *
      (QUIT INPUT DATA GOES HERE.)
** NOTE: THIS SHOULD BE A /* CARD FOR RUNNING
//SORT EXEC PGM=ISRCMD,PARM=PGREF=150000
//SYSDUT DD SYSOUT=A
//SYSPRINT DD EMBY
//SYSLMOD DD UNIT=SYSNDA,SPACE=(1024,(150,20,11))
//SYSLIN DD UNIT=SYSNDA,SPACE=(80,(150,10))
//SORTLIB CC CSNAME=SVSI,SORTLIB,CISQ=OLD
//SYVSUTL DD UNIT=SYSNDA,SPACE=(1024,(150,20))
//SORTIN CC DISP=OLD,DELETE,CSNAME=*,CO,INPUT
//SORTOUT CC DISP=(NEW,PASS),DNAME=*.GD,INDEXED
//SORTAK01 CC UNIT=SYSNDA,SPACE=(TRK,(300),,CONTIG)
//SORTAK02 CC UNIT=SYSNDA,SPACE=(TRK,(300),,CONTIG)
//SORTAK03 CC UNIT=SYSNDA,SPACE=(TRK,(300),,CONTIG)
//SORTAK04 CC UNIT=SYSNDA,SPACE=(TRK,(300),,CONTIG)
//SORTAK05 CC UNIT=SYSNDA,SPACE=(TRK,(300),,CONTIG)
//SORTAK06 CC UNIT=SYSNDA,SPACE=(TRK,(300),,CONTIG)
//SYSLIN DD *
      SORT FIELDS=(2,1,CH,A,65,20,CH,A),SIZE=FI0000
** NOTE: THIS SHOULD BE A /* CARD FOR RUNNING
//LKCI EXEC PGM=TFWL
//SYSLIB DD DISP=CLD,DNAME=SVSI,PLILIB
//SYSWMCD CC CSNAME=GGOST2(GCI),DISP=(NEW,PASS),UNIT=SYSNA,
// SPACE=41024,(150,20,11)
// //SYVSUTL DD UNIT=2314,SPACE=(CYL,(4,4))
//SYSPRINT DD SYSOUT=A
//SYSLIN DD *
      (OBJECT DECK FOR QUITC GOES HERE.)
** NOTE: THIS SHOULD BE A /* CARD FOR RUNNING
//GO EXEC PGM=LKCI,SYSLMOD,COND=(9,LT,LK02)
//SYSCONT DD SYSOUT=A
//PRINTED CC SYSCUT=A,DC=RECFM=FB,RLSIZE=133,PGFM=FB
//OUTPUT DD DISP=OLD,DELETE,CSNAME=*,CO,OUTPUT
//INCEVED CC DISP=OLD,DELETE,CSNAME=*,CO,INCEVED

```


OPTIONS IN USE:
PRINT RIBLIOGRAPHY
STOP WORDS

4 THE AN AND AS AT BY FOR
TITLE WITH RUN OF JOURNAL REFERENCES

THE TOTAL LIST OF PRIONS TO BE USED ARE:

INPUT WILL BE FROM FILE "SYSIN".

EACH OUTPUT PAGE WILL BE 60 LINES LONG;
EACH LINE WILL BE 80 CHARACTERS WIDE (8.0 INCHES).

THE 12 STOP WORDS TO BE USED ARE:

A	AN	AND	AS	AT	BY
FOR	HE	HIS	OF	ON	TO
UP	US	WE	WITH	YOU	

THE 11 BREAK CHARACTERS TO BE USED ARE: ". (1-1:2", "0

1 COPY OF THE BIBLIOGRAPHY WILL BE PRINTED.

1 COPY OF THE INDEX WILL BE PRINTED.

INDEX SECTIONS 'I' WILL CONTAIN CARD TYPES '2', 'AS SHOWN IN THE FOLLOWING TABL

INDEX SECTION	CARD TYPE
1	'2, '

THE TITLE TO BE USED IS: ' THIS IS A SAMPLE QUCIK RUN OF JOURNAL REFERENCES

70 INDEXED LINES WILL BE SORTED AND PRINTED.

61 LINES OF BIBLIOGRAPHY WILL BE PRINTED.

A TOTAL OF 132 LINES WILL BE PRINTED.

14 * APPEALS RIGHT OF 704 * ABOVE

"IN" APPEARS RIGHT OF "FOR" ABOVE
 C--- STEP WORDS OF ***
 ON

THIS IS A SAMPLE QUIC RUN OF JOURNAL REFERENCES
SECTION 'I'

0400 2

2271	SOME THOUGHTS ON SIBLING RELATIONSHIPS#	SOCOW-NOV-67
2271	IONSHIPS#	SOCOW-NOV-67
2272	NATIONAL EXPERIMENT IN STAFF DEVELOPMENT#	SOCOW-NOV-67
2264	OF GROUP DIFFERENCES#	AMPSY-OCT-67
2265	Y AND THE BIOLOGY OF EMOTION: STRUCTURAL APPROACH# /NEUROLOGICAL	AMPSY-OCT-67
2261	INDIVIDUALS: A DOUBLE-BLIND STUDY# /STENCIL IN BRAIN-DAMAGE	NEUR-OCT-67
2267	LOGICAL TESTING: PSYCHOLOGICAL TESTING FROM THE POINT OF VIEW	AMPSY-OCT-67
2267	NEW LOOK AT PSYCHOLOGICAL TESTING: PSYCHOLOGICAL TESTING	AMPSY-OCT-67
	THE * NOT INDEXED	
2263	NITROFURANTHIN (FURADANTIN-R) THERAPY IN HEMODIUREMIC PATIENTS#	FUR-OCT-67
2270	ATIVE COUNSELING COMPONENT OF THERAPY#	SOCOW-NOV-67
2271	IPS#	SOCOW-NOV-67
2267	AL TESTING FROM THE POINT OF VIEW OF A BEHAVIORIST# /POLY	AMPSY-OCT-67

END OF SECTION 'I'