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KWIC (Key Words in Context) 1620-10.3.041

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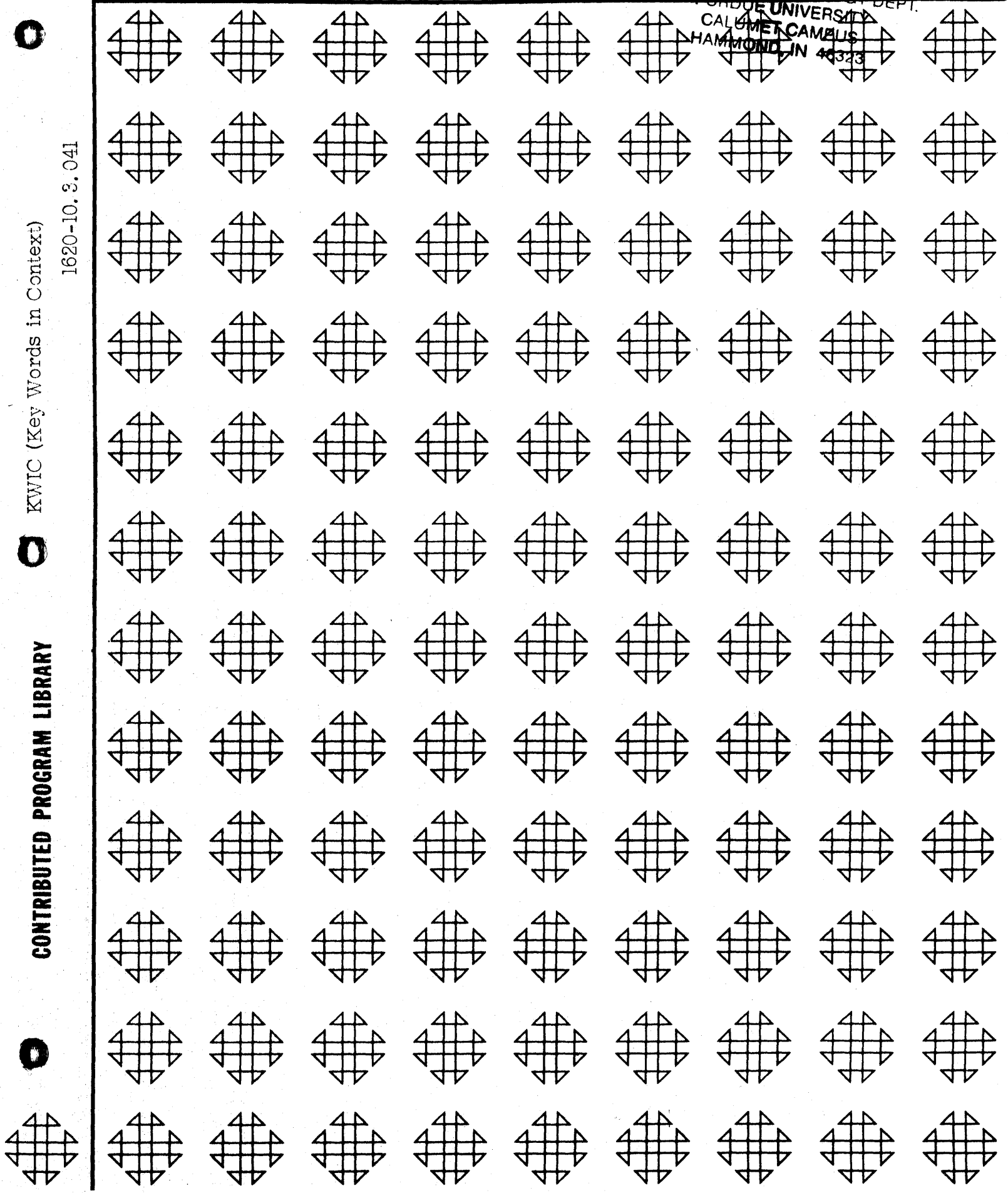

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(fill out in typewriter, ink or pencil)

Program No._____ Date_____

Program Name:_____

1. Does the abstract adequately describe what the program is and what it does? Yes____ No____
   Comment_____

2. Does the program do what the abstract says? Yes____ No____
   Comment_____

3. Is the description clear, understandable, and adequate? Yes____ No____
   Comment_____

4. Are the Operating Instructions understandable and in sufficient detail? Yes____ No____
   Comment_____
   Are the Sense Switch options adequately described (if applicable)? Yes____ No____
   Are the mnemonic labels identified or sufficiently understandable? Yes____ No____
   Comment_____

5. Does the source program compile satisfactorily (if applicable)? Yes____ No____
   Comment_____

6. Does the object program run satisfactorily? Yes____ No____
   Comment_____

7. Number of test cases run_____. Are any restrictions as to data, size, range, etc. covered adequately in description? Yes____ No____
   Comment_____

8. Does the Program meet the minimal standards of COMMON? Yes____ No____
   Comment_____

9. Were all necessary parts of the program received? Yes____ No____
   Comment_____

10. Please list on the back any suggestions to improve the usefulness of the program. These will be passed onto the author for his consideration.

Please return to:

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Your Name _____
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2/2/67

KWIC (Key Words in Context)

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Modifications or revisions to this program, as they occur, will be announced in the appropriate Catalog of Programs for IBM Data Processing Systems. When such an announcement occurs, users should order a complete new program from the Program Information Department.

DECK KEY

1. KWIC Listing deck - Part 1
2. KWIC Listing deck - Part 2
3. All inclusive condensed deck

ABSTRACT

M. M. GOLD
9 SEPT. 1963

1) Title: KWIC (Key Words in Context)

2) Description

a) This program reads in title cards with an ID code either beginning in column 1 or ending in column 80. If necessary, it moves the ID code to end in column 80 and then rotates the title image until a word begins in column 40. It compares this word with stored "non-key" words and punches a card with each "key-word" as the leading word in the title. Included on the right-hand side will be the ID code of any length specified.

b) The output format is such that the user may specify the "key-words" begin either in column 1 or column 41 (with columns 39 and 40 blank).

c) No alteration of the input cards is necessary.

d) The user can use the key words supplied with the program or may use his own.

3) Computer

a) IBM 1620, indirect addressing, card I/O

b) Memory: 8207 digits.

c) Program stored: 402-8605

4) Program language: SPS

5) Running time: Function of number of cards to be punched. The program will punch approximately 200 cards per minute.

PROGRAM WRITEUP

I. Title-KWIC (key words in Context)

II. Description of Progeam

a) This program reads in title cards with an ID code either beginning in column 1 or ending in column 80. If necessary, it moves the ID code to end in column 80 and then rotates the title image until a owrd begins in column 40. It compares this word with stored "non-key" words and punches a card with each "key-word" as the leading word in the title. Included on the right-hand side will be the ID code of any length specified.

b) The output format is such that the user may specify the "key-words" begin either in column 1 or column 41 (with columns 39 and 40 blank).

c) No alteration of the input cards in necessary.

d) The user can use the key words supplied with the program or may use his own.

III. Input

a) The first card must be a control card giving the program various information concerning your title cards and non-key word cards (if any).

1. The card column containing the first digit or letter of the variable field must be placed in columns 1-2. This will always be the first column (01) unless there is an identification code on the left side of the card.

2. Card columns 3-4 should contain the length of the variable field.

3. If the user wishes to use his own non-key word cards, there should be a digit one (1) in column 6 on the control card.

4. If the user wishes cards with incorrect input formats to be punched as well as having error messages typed, there should be a digit one (1) punched in card column 8. If there is not, the program will type out an error message and then read the next card.

b) No alteration of cards to be KWIC indexed is necessary.

c) "Non-key words" are included with the condensed deck. By placing the digit 1 in column 6 of the control card, the program will read the cards directly after the control card as non-key word cards. By entering any other non-key word cards, the user eliminates those supplied with the program. Care must be taken to ensure that all desired non-key word cards are included. As a precautionary measure, the non-key words used in processing are typed before the key-word indexing begins.

1) Non-key word cards may be prepared as follows: each card must begin with a word in column 1. Between each word there can be one and only one space, although a card may end after having used from 1 to 75 columns simply by ending the list for that card. There may be as many cards as desired, but the last card must contain two spaces after the last word and then the digit one (1).

If the user desires to insert words into those within the program, he sould insert these card(s) before the last card of the program deck. There should not be a 1st card indicator.

IV. Machine Requirements

a) Computer: IBM 1620, Indirect addressing, card I/O

b) Storage: 8204 digits

c) Program stored: 402-8605

d) Language: SPS

e) Subroutines: none

V. Error Messages

The first column of the fixed field must be blank. If it is not, the following error message is typed with a (V) placed in the first line to indicate the card image error in the second line of type.

COLUMN XX IS NOT BLANK AS REQUIRED.

(CARD IMAGE)

If control card column 8 has a 1, the program will key-word index the card image which has been typed, although there will be some error in the output key word indexed beginning in column 41. If column 8 is blank or has a zero, the program will read the next card and will not key-word index the incorrect card. Once the error message is typed, any subsequent errors will produce only the card image on the typewriter.

VI. Errors

The program will check stop with a mar address of one greater than memory if any word on the input card is longer than 30 columns. Once this happens, the program must be reloaded and the offending card removed.

VII. Flow Chart

See next page.

VIII. Program

a) Program listing

1. An uncondensed SPS listing is attached with comment card inserted.

b) Data format

1. Input Format

There should be a blank field as the first column of the fixed field.

2. Output format

The key-words can be outputed in either column one(1) and/or forty-one (41). [Those cards KWIC indexed in column 41 are blank in columns 39 and 40]. If Sw 1 is on, the key-word will begin the card image in column 41. If Sw 1 is off, the key-words will begin the image in column 1. If both switches are off, output will be mixed and will require sorting for blanks in columns 39 and 40. Those with blanks in both will be sorted on the last column of the variable field. The non-blanks will have output beginning in column 41. All others begin in column 1.

Sample Problems

The following examples all use the non-key words supplied with the deck. They are:

A ADD ADDS (etc.)

Each problem is set up to include the control card used, the input data card, and the output.

The first example is run with program switch 1 on. The second has program switch 2 on. Example 3 makes use of the shifting of the ID code to the right hand side.

OPERATING INSTRUCTIONS

1. Check switch settings
   a. SW 1 on for output beginning only in column 41
   b. SW 2 on for output beginning only in column 1
   c. Both off for both types of output
   d. SW 3 and SW 4 not used
2. Place decks in hopper and press load
   a. Object deck
   b. Control card
   c. User's nonkey word cards (if desired)
   d. Cards to be key-word indexed
3. If an error is discovered on the input cards, the following error message is typed (The column referred to depends upon the length of the variable field); with a (V) placed in the first line to indicate the card image error in the second line of type.

   COLUMN XX IS NOT BLANK AS REQUIRED.

   (CARD IMAGE)

   If a 1 was typed in card column 8 on the control card, the card which is in error will be key-word indexed as correctly as possible. If a zero was entered, the program will read the next card.