DECUS

PROGRAM LIBRARY

DECUS NO.	8-196
TITLE	DET - DETECT KEY WORDS
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DATE	October 10, 1968
SOURCE LANGUAGE	PAL III

DET - DETECT KEY WORDS

DET will detect a key word or words from any sentence that is typed in. Upon detection the program will execute the JMP instruction that is associated with that key. All other words in the sentence will not be effected so that any arrangement of words can be used. A basic "Conversation" tupe routine called "SPELL" is included to demonstrate the program operation. "FOCAL" was not used so as to have as much space possible for key words and answers.

"DET" is linked to gether with a "REPLY" program. REPLY randomly selects an answer from a specific class of answers, i.e.

1. The key word selects an answer from a class

2. A random number selects a sentence from a class

3. A format number selects classes of words for the sentence

4. A random number selects a word for each word class (variable word) within the sentence, this allows for a vast combination of replies to key words.

OPERATION

1. Load the program with bin loader.

2. Start at address 0200.

3. Type in any sentence which includes key word or words, followed by a space and a carriage return.

4. If two key words are included, it will only detect the last one.

5. If key word is misspelled it will not detect it.

NOTE: Not all the states have been included in the "SPELL" program. The only key word not a state is "DUMB."

TYPEOUT FOR "SPELL" ROUTINE

IS THIS HOW TO SPELL UTAH ?
THAT IS CORRECT

IS THE STATE OF UTAH SPELLED LIKE THIS ?
THAT IS CORRECT

DOES THIS SPELL MASSACHUSETTS ?
YOU ARE A GENIUS

DOES THIS SPELL MASSACHUSETS ?
YOU GOOFED TRY AGAIN

IS THE STATE OF PENNSYLVANNIA SPELLED OK
YOU GOOFED TRY AGAIN

HOW ABOUT SPELLING PENNSYLVANIA THI WAY
THAT IS PRETTY GOOD SPELLING

HOW ABOUT ALASKA
YOU GOOFED TRY AGAIN (NOT IN STORAGE)

HOW CAN YOU BE SO DUMB
DO YOU HATE ME

OHIO
THAT IS CORRECT

WYOMING
THAT IS PRETTY GOOD SPELLING

OHIO AND WYOMING
THAT IS PRETTY GOOD SPELLING

WYOMING AND OHIO
THAT IS CORRECT

} Last Key Word is Detected Only

WYEOMING AND OHIO
THAT IS CORRECT

WYOMING AND OHIIO
THAT IS PRETTY GOOD SPELLING

WYOMING AND MASSACHUSETS
THAT IS PRETTY GOOD SPELLING

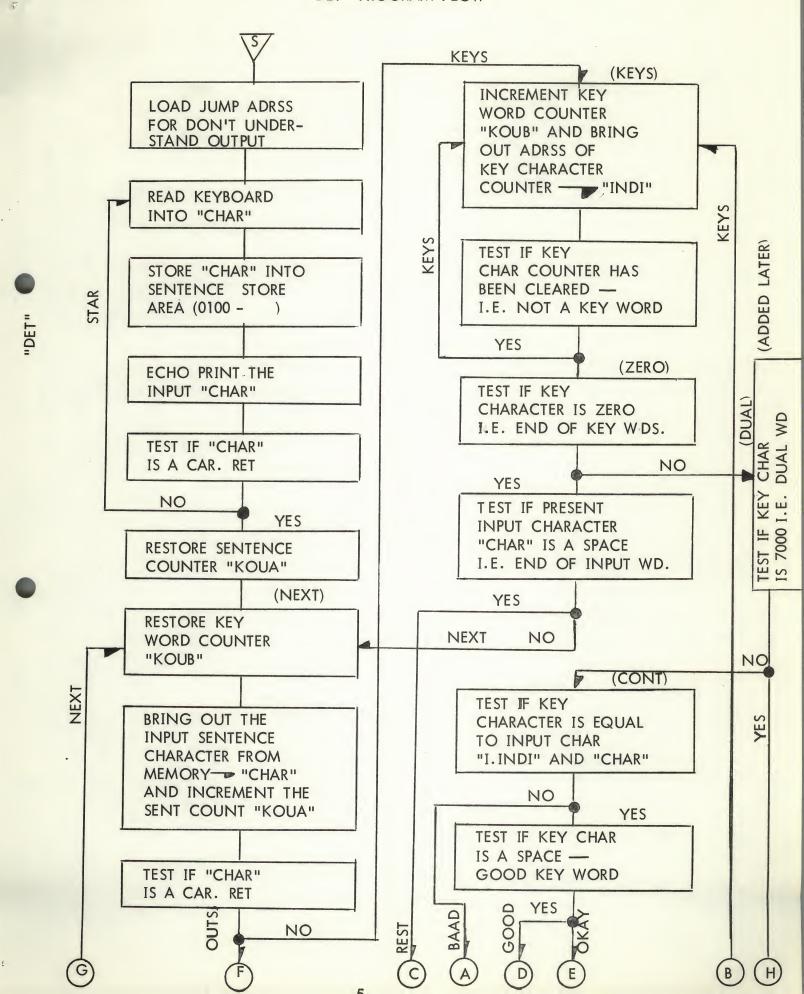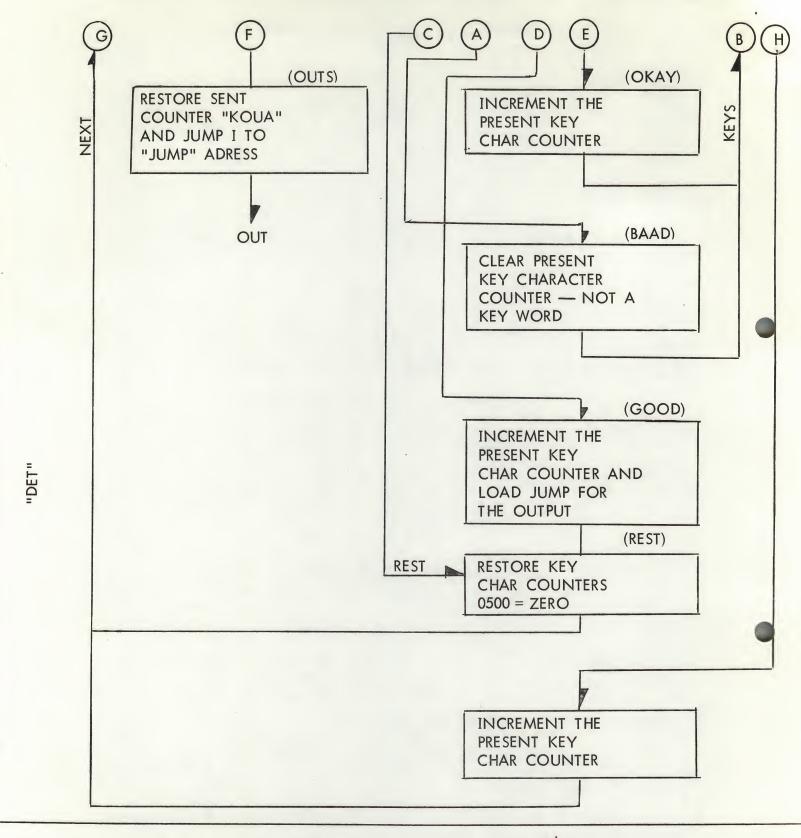WYOMING AND MASSACHUUSSEETS
THAT IS PRETTY GOOD SPELLING

} Only One Key Word

2

Ø2ØØ	724Ø	Ø361	336Ø	6Ø32	
Ø2Ø4	6Ø31	52Ø4	6Ø34	3362	
Ø21Ø	724Ø	Ø362	3764	2364	
Ø214	6Ø42	724Ø	Ø362	(6Ø44)	7ØØØ
Ø22Ø	6Ø41	522Ø	724Ø	Ø362	
Ø224	137Ø	7Ø4Ø	744Ø	52Ø3	
Ø23Ø	724Ø	Ø365	3364	724Ø	
Ø234	Ø367	3366	724Ø	Ø764	
Ø24Ø	3362	2364	724Ø	Ø362	
Ø244	137Ø	7Ø4Ø	744Ø	5251	
Ø25Ø	5354	2366	724Ø	Ø766	
Ø254	3363	724Ø	Ø363	744Ø	
Ø26Ø	5262	5251	724Ø	Ø763	
Ø264	744Ø	5275	724Ø	Ø362	
Ø27Ø	1371	7Ø4Ø	744Ø	5233	
Ø274	5334	724Ø	Ø763	1372	
Ø3ØØ	7Ø4Ø	744Ø	53Ø5	2362	
Ø3Ø4	5323	724Ø	Ø763	7Ø4Ø	
Ø31Ø	1362	7Ø4Ø	744Ø	5325	
Ø314	724Ø	Ø763	1371	7Ø4Ø	
Ø32Ø	744Ø	5323	533Ø	2766	
Ø324	5251	72ØØ	3766	5251	
Ø33Ø	2363	724Ø	Ø763	336Ø	
Ø334	724Ø	Ø773	3775	2373	
Ø34Ø	2375	724Ø	Ø773	744Ø	
Ø344	5334	724Ø	Ø374	3373	
Ø35Ø	724Ø	Ø376	3375	5233	
Ø354	724Ø	Ø365	3364	576Ø	
Ø36Ø	Ø614	Ø614	Ø215	2344	
Ø364	Ø1ØØ	Ø1ØØ	(Ø477)	(Ø477)	
Ø37Ø	7562	7537	Ø777	1Ø25	
Ø374	1Ø25	1ØØØ	1ØØØ	ØØØØ	

"DET"

THIS IS THE "DET" DETECT PROGRAM
INCLUDED IN "SPELL"

KOUB

366 = Ø777	
367 = Ø777	

SPACE AFTER LAST WORD!

Ø5ØØ	Ø2ØØ	236Ø	72ØØ	176Ø
Ø5Ø4	744Ø	53Ø7	57ØØ	72ØØ
Ø51Ø	176Ø	1361	744Ø	5316
Ø514	176Ø	5353	72ØØ	176Ø
Ø52Ø	1362	744Ø	5325	176Ø
Ø524	5353	72ØØ	176Ø	1363
Ø53Ø	744Ø	5334	176Ø	5353
Ø534	72ØØ	176Ø	7Ø12	7Ø12
Ø54Ø	7Ø12	Ø364	1365	6Ø44
Ø544	6Ø41	5344	6Ø42	72ØØ
Ø55Ø	176Ø	Ø364	1365	(6Ø44)(6Ø46)
Ø554	6Ø41	5354	6Ø42	53Ø1
Ø56Ø	ØØØØ	7563	7566	754Ø
Ø564	ØØ77	Ø3ØØ		

"TOW.II"

(TO CHECK "DET"⟶ Ø5Ø1 = 74Ø2)

3

```
Ø6ØØ      (1372  3623  5622)  1373              "TOW.II" CLINK
Ø6Ø4       3623  5622  1374  3623
Ø61Ø       5622  1375  3623  5622
Ø614      (1376  3623  5622)  1377
Ø62Ø       3623  5622  Ø5Ø1  Ø56Ø
Ø624       ØØØØ  Ø212  27Ø1  24Ø3   -  WATCH YOUR LANGUAGE    "TOW.II" FONT
Ø63Ø       1Ø77  Ø24Ø  3117  2522
Ø634       Ø24Ø  14Ø1  16Ø7  25Ø1
Ø64Ø       Ø7Ø5  Ø24Ø  Ø215  Ø212
Ø644       ØØØØ  Ø212  Ø417  Ø24Ø
Ø65Ø       3117  2577  Ø24Ø  1ØØ1
Ø654       24Ø5  Ø24Ø  15Ø5  Ø24Ø
Ø66Ø       Ø215  Ø212  ØØØØ  ØØØØ
```

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"DET" PROGRAM FLOW

"DET"

S

LOAD JUMP ADRSS
FOR DON'T UNDER-
STAND OUTPUT

READ KEYBOARD
INTO "CHAR"

STAR

STORE "CHAR" INTO
SENTENCE STORE
AREA (0100 -   )

ECHO PRINT THE
INPUT "CHAR"

TEST IF "CHAR"
IS A CAR. RET

NO   YES

RESTORE SENTENCE
COUNTER "KOUA"

(NEXT)

RESTORE KEY
WORD COUNTER
"KOUB"

NEXT

BRING OUT THE
INPUT SENTENCE
CHARACTER FROM
MEMORY→ "CHAR"
AND INCREMENT THE
SENT COUNT "KOUA"

TEST IF "CHAR"
IS A CAR. RET

OUTS   NO

G   F

KEYS

(KEYS)
INCREMENT KEY
WORD COUNTER
"KOUB" AND BRING
OUT ADRSS OF
KEY CHARACTER
COUNTER → "INDI"

KEYS   KEYS

TEST IF KEY
CHAR COUNTER HAS
BEEN CLEARED —
I.E. NOT A KEY WORD

YES

(ZERO)
TEST IF KEY
CHARACTER IS ZERO
I.E. END OF KEY WDS.

NO

YES

TEST IF PRESENT
INPUT CHARACTER
"CHAR" IS A SPACE
I.E. END OF INPUT WD.

YES

NEXT   NO

(CONT)
TEST IF KEY
CHARACTER IS EQUAL
TO INPUT CHAR
"I.INDI" AND "CHAR"

NO   YES

TEST IF KEY CHAR
IS A SPACE —
GOOD KEY WORD

REST   BAAD   GOOD   YES   OKAY

C   A   D   E

(ADDED LATER)

(DUAL)

TEST IF KEY CHAR
IS 7000 I.E. DUAL WD

NO

YES

B   H

5

"DET"

G   F   C A D E   B H

NEXT

(OUTS)

RESTORE SENT
COUNTER "KOUA"
AND JUMP I TO
"JUMP" ADRESS

OUT

(OKAY)

INCREMENT THE
PRESENT KEY
CHAR COUNTER

KEYS

(BAAD)

CLEAR PRESENT
KEY CHARACTER
COUNTER — NOT A
KEY WORD

(GOOD)

INCREMENT THE
PRESENT KEY
CHAR COUNTER AND
LOAD JUMP FOR
THE OUTPUT

(REST)

REST

RESTORE KEY
CHAR COUNTERS
0500 = ZERO

INCREMENT THE
PRESENT KEY
CHAR COUNTER

1.   USE "DET" AND VARIABLE DATA C (HAND LOAD 2nd PART)

OR

2.   USE "SPELL" WHICH INCLUDES "DET" (TAPE PROVIDED)

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"DET" INSTRUCTIONS

```
                        *Ø2ØØ
Ø2ØØ  724Ø    BEGN,     STA
Ø2Ø1  Ø361              AND     RJUM      /RESET FOR DON'T UNDERSTAND
Ø2Ø2  336Ø              DCA     JUMP
Ø2Ø3  6Ø32    STAR,     KCC               /CLEAR FLAG AND ACC
Ø2Ø4  6Ø31    WAIT,     KSF               /SKIP IF FLAG
Ø2Ø5  52Ø4              JMP     WAIT      /JUMP WAIT
Ø2Ø6  6Ø34              KRS               /READ KEY TO ACC
Ø2Ø7  3362              DCA     CHAR
Ø21Ø  724Ø              STA
Ø211  Ø362              AND     CHAR
Ø212  3764              DCA  I  KOUA      /DEP EACH CHAR IN SENTENCE AREA "A"
Ø213  2364              ISZ     KOUA      /INCREMENT AREA "A" COUNTER
Ø214  6Ø42              TCF               /CLR FLAG AND ACC
Ø215  724Ø              STA
Ø216  Ø362              AND     CHAR
Ø217  6Ø44              TPC               /ECHO PRINT THE INPUT
Ø22Ø  6Ø41    WOAH,     TSF               /SKIP IF FLAG
Ø221  522Ø              JMP     WOAH      /JUMP WAIT
Ø222  724Ø              STA
Ø223  Ø362              AND     CHAR      /INPUT CHARACTER
Ø224  137Ø              TAD     MASA      /ADD MASK (7562) CAR RET
Ø225  7Ø4Ø              CMA
Ø226  744Ø              SZA               /ZERO=CAR RET=SENTENCE END
Ø227  52Ø3              JMP     STAR      /RETURN FOR NEXT CHARACTER
Ø23Ø  724Ø              STA
Ø231  Ø365              AND     RSKA
Ø232  3364              DCA     KOUA      /RESTORE AREA "A" COUNTER
Ø233  724Ø    NEXT,     STA
Ø234  Ø367              AND     RSKB
Ø235  3366              DCA     KOUB      /RESTORE KEY CHARACTER COUNTER
Ø236  724Ø              STA
Ø237  Ø764              AND  I  KOUA      /BRING OUT INPUT CHAR FOR COMPARE
Ø24Ø  3362              DCA     CHAR
Ø241  2364              ISZ     KOUA      /INCREMENT AREA "A" COUNTER
Ø242  724Ø              STA
Ø243  Ø362              AND     CHAR
Ø244  137Ø              TAD     MASA      /ADD MASK (7562) CAR RET
Ø245  7Ø4Ø              CMA
Ø246  744Ø              SZA               /ZERO=CAR RET=SEARCH END
Ø247  5251              JMP     KEYS
Ø25Ø  5354              JMP     OUTS      /END OF SEARCH-NEXT ROUTINE
Ø251  2366    KEYS,     ISZ     KOUB      /INCREMENT AREA "B" COUNTER (START ▬
Ø252  724Ø              STA
Ø253  Ø766              AND  I  KOUB      /BRING OUT KEY CHARACTER FOR COMPARE
Ø254  3363              DCA     INDI
Ø255  724Ø              STA
Ø256  Ø363              AND     INDI      /HOLDS ADRSS OF KEY CHARACTER
Ø257  744Ø              SZA               /ZERO=NOT A KEY WORD
```

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Ø26Ø	5262		JMP	ZERO
Ø261	5251		JMP	KEYS	/NEXT KEY CHARACTER
Ø262	724Ø	ZERO,	STA	
Ø263	Ø763		AND I	INDI
Ø264	744Ø		SZA		/ZERO=END OF KEY WORDS
Ø265	5275		JMP	DUAL
Ø266	724Ø		STA	
Ø267	Ø362		AND	CHAR
Ø27Ø	1371		TAD	MASB	/ADD MASK (7537) SPACE
Ø271	7Ø4Ø		CMA	
Ø272	744Ø		SZA		/ZERO=SPACE=END OF INPUT WORD
Ø273	5233		JMP	NEXT
Ø274	5334		JMP	REST
Ø275	724Ø	DUAL,	STA	
Ø276	Ø763		AND I	INDI	/TEST IF DUAL WORD
Ø277	1372		TAD	MASC
Ø3ØØ	7Ø4Ø		CMA	
Ø3Ø1	744Ø		SZA		/ZERO INDICATES DUAL KEY WORD
Ø3Ø2	53Ø5		JMP	CONT
Ø3Ø3	2362		ISZ	CHAR	/INCREMENT TO SKIP SPACE
Ø3Ø4	5323		JMP	OKAY
Ø3Ø5	724Ø	CONT,	STA	
Ø3Ø6	Ø763		AND I	INDI	/KEY CHARACTER FOR COMPARE
Ø3Ø7	7Ø4Ø		CMA	
Ø31Ø	1362		TAD	CHAR	/INPUT CHARACTER FOR COMPARE
Ø311	7Ø4Ø		CMA	
Ø312	744Ø		SZA		/ZERO=INDI AND CHAR COMPARE
Ø313	5325		JMP	BAAD	/NOT A KEY WORD
Ø314	724Ø		STA	
Ø315	Ø763		AND I	INDI
Ø316	1371		TAD	MASB	/ADD MASK (7537) SPACE
Ø317	7Ø4Ø		CMA	
Ø32Ø	744Ø		SZA		/ZERO=SPACE=GOOD KEY WORD
Ø321	5323		JMP	OKAY
Ø322	533Ø		JMP	GOOD
Ø323	2766	OKAY,	ISZ I	KOUB	/INCREMENT PRESENT KEY COUNTER
Ø324	5251		JMP	KEYS	/NEXT KEY WORD
Ø325	72ØØ	BAAD,	CLA	
Ø326	3766		DCA I	KOUB	/CLEAR COUNTER
Ø327	5251		JMP	KEYS	/NEXT KEY WORD
Ø33Ø	2363	GOOD,	ISZ	INDI	/INCREMENT KEY COUNT
Ø331	724Ø		STA	
Ø332	Ø763		AND I	INDI
Ø333	336Ø		DCA	JUMP	/LOAD JUMP FOR OUTPUT TO SUBROUTINE
Ø334	724Ø	REST,	STA		/TO RESET THE KEY CHAR COUNTERS
Ø335	Ø773		AND I	KOUC
Ø336	3775		DCA I	KOUD	/RESET EACH COUNTER
Ø337	2373		ISZ	KOUC	/INCREMENT COUNTER

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Ø34Ø  2375           ISZ     KOUD      /INCREMENT COUNTER
Ø341  724Ø           STA
Ø342  Ø773           AND I   KOUC      /TO CHECK IF ALL WORDS TRANSFERRED
Ø343  744Ø           SZA               /ZERO=END OF TRANSFER
Ø344  5334           JMP     REST
Ø345  724Ø           STA
Ø346  Ø374           AND     RSKC
Ø347  3373           DCA     KOUC      /RESET KOUC
Ø35Ø  724Ø           STA
Ø351  Ø376           AND     RSKD
Ø352  3375           DCA     KOUD      /RESET KOUD
Ø353  5233           JMP     NEXT      /NEXT INPUT CHARACTER
Ø354  724Ø    OUTS,  STA
Ø355  Ø365           AND     RSKA
Ø356  3364           DCA     KOUA      /RESET AREA "A" COUNTER
Ø357  576Ø           JMP I   JUMP      /TO NEXT SUBROUTINE
Ø36Ø  ØØØØ    JUMP,  ØØØØ              /ADDRESS OF NEXT SUBROUTINE
Ø361  ØØØØ    RJUM,  ØØØØ              /RESET FOR DON'T UNDERSTAND ETC.
Ø362  ØØØØ    CHAR,  ØØØØ              /HOLDS INPUT CHARACTER
Ø363  ØØØØ    INDI,  ØØØØ              /HOLDS ADDRESS OF KEY CHARACTER
Ø364  Ø1ØØ    KOUA,  Ø1ØØ              /INPUT CHARACTER ADDRESS
Ø365  Ø1ØØ    RSKA,  Ø1ØØ              /RESET KOUA
Ø366  Ø477    KOUB,  Ø477              /KEY CHARACTER ADDRESS
Ø367  Ø477    RSKB,  Ø477              /RESET KOUB
Ø37Ø  7562    MASA,  7562              /MASK FOR CAR RET
Ø371  7537    MASB,  7537              /MASK FOR SPACE
Ø372  Ø777    MASC,  Ø777              /MASK FOR IGNORE SPACE
Ø373  ØØØØ    KOUC,  ØØØØ              /FOR CHAR COUNT RESTORE
Ø374  ØØØØ    RSKC,  ØØØØ              /RESET KOUC
Ø375  ØØØØ    KOUD,  ØØØØ              /FOR CHARACTER COUNT RESET
Ø376  ØØØØ    RSKD,  ØØØØ              /RESET KOUD
```

BAAD	Ø325
BEGN	Ø2ØØ
CHAR	Ø362
CONT	Ø3Ø5
DUAL	Ø275
GOOD	Ø33Ø
INDI	Ø363
JUMP	Ø36Ø
KEYS	Ø251
KOUA	Ø364
KOUB	Ø366
KOUC	Ø373
KOUD	Ø375
MASA	Ø37Ø
MASB	Ø371
MASC	Ø372
NEXT	Ø233
OKAY	Ø323
OUTS	Ø354
REST	Ø334
RJUM	Ø361
RSKA	Ø365
RSKB	Ø367
RSKC	Ø374
RSKD	Ø376
STAR	Ø2Ø3
WAIT	Ø2Ø4
WOAH	Ø22Ø
ZERO	Ø262

"DET". VARIABLE DATA "C"

(USE THIS ROUTINE OR "SPELL" ROUTINE)

INPUT SENTENCE

KOUA	CHAR	
0100	0317	O
0101	0310	H
0102	0240	
0103	0311	I
0104	0324	T
0105	0240	
0106	0322	R
0107	0301	A
0110	0316	N
0111	0240	
0112	0215	

COUNTERS

KOUA	0100 - 0112
KOUB	0477 - 0502
KOUC	0600 - 0603
KOUD	0500 - 0502
INDI	04XX

KOUB	INDI
0500	0400 - 0403
0501	0404 - 0413
0502	0414 - *

KOUC		
0600	0400	
0601	0404	
0602	0414	RESTORE
0603	0000	

KEY WORDS

*0500			
0400	0315	M	
0401	0331	Y	
0402	0240		
0403	0650		→ OUT
0404	0311	I	
0405	0324	T	
0406	7000	.	← DUAL
0407	0322	R	
0410	0301	A	
0411	0316	N	
0412	0240		
0413	0650		→ OUT
0414	0000		

*EACH WORD HAS A COUNTER

KOUA	INPUT CHAR ADRSS
KOUB	KEY WORD ADRSS
KOUC	CHAR COUNT RESTORE
0500	KEY CHAR COUNT

TEMP STORE

CHAR	(0301)	EXAMPLE
INDI	(0405)	EXAMPLE

LOCATIONS

0000 – 0177	SENTENCE
0200 – 0377	PROGRAM
0400 – 0577	KEY WORDS
0600 – 0777	RESTORE

11

Ø664	ØØØØ	Ø212	3117	2577		
Ø67Ø	Ø24Ø	Ø122	Ø577	Ø24Ø		
Ø674	Ø177	Ø24Ø	Ø7Ø5	1611		
Ø7ØØ	2523	Ø24Ø	Ø215	Ø212		
Ø7Ø4	ØØØØ	Ø212	241Ø	Ø124		
Ø71Ø	Ø24Ø	1123	Ø24Ø	2Ø22		
Ø714	Ø524	2431	Ø24Ø	Ø717		
Ø72Ø	17Ø4	Ø24Ø	232Ø	Ø514		
Ø724	1411	16Ø7	Ø24Ø	Ø215		
Ø73Ø	Ø212	ØØØØ	Ø212	3117	–	YOU GOOFED TRY AGAIN
Ø734	2577	Ø24Ø	Ø717	17Ø6		
Ø74Ø	Ø5Ø4	Ø24Ø	2422	3177		
Ø744	Ø24Ø	Ø1Ø7	Ø111	1677		
Ø75Ø	Ø24Ø	Ø215	Ø212	ØØØØ		
Ø754	Ø212	241Ø	Ø124	Ø24Ø		
Ø76Ø	1123	Ø24Ø	Ø317	2222		
Ø764	Ø5Ø3	2477	Ø24Ø	Ø215		
Ø77Ø	Ø212	ØØØØ	Ø624	Ø644		
Ø774	Ø664	Ø7Ø4	Ø731	Ø753		
1ØØØ	1Ø52	1Ø71	11Ø4	1122		"DET" LINK
1ØØ4	1134	1146	1163	1176		
1Ø1Ø	121Ø	1223	1233	1244		
1Ø14	1261	1273	13Ø5	1314		
1Ø2Ø	1322	133Ø	1337	1345		
1Ø24	1Ø55	1Ø52	1Ø71	11Ø4		
1Ø3Ø	1122	1134	1146	1163		
1Ø34	1176	121Ø	1223	1233		
1Ø4Ø	1244	1261	1273	13Ø5		
1Ø44	1314	1322	133Ø	1337		
1Ø5Ø	1345	ØØØØ	Ø315	Ø3Ø1	–	MASS	"DET" FONT
1Ø54	Ø323	Ø323	Ø3Ø1	Ø3Ø3		
1Ø6Ø	Ø31Ø	Ø325	Ø323	Ø3Ø5		
1Ø64	Ø324	Ø324	Ø323	Ø24Ø		
1Ø7Ø	Ø6Ø6	Ø324	Ø3Ø5	Ø316	–	TENN
1Ø74	Ø316	Ø3Ø5	Ø323	Ø323		
11ØØ	Ø3Ø5	Ø3Ø5	Ø24Ø	Ø6Ø6		
11Ø4	Ø32Ø	Ø3Ø5	Ø316	Ø316	–	PENN
111Ø	Ø323	Ø331	Ø314	Ø326		
1114	Ø3Ø1	Ø316	Ø311	Ø3Ø1		
112Ø	Ø24Ø	Ø611	Ø315	Ø311	–	MICH
1124	Ø3Ø3	Ø31Ø	Ø311	Ø3Ø7		
113Ø	Ø3Ø1	Ø316	Ø24Ø	Ø617		
1134	Ø315	Ø311	Ø323	Ø323	–	MO
114Ø	Ø317	Ø325	Ø322	Ø311		
1144	Ø24Ø	Ø617	Ø315	Ø311	–	MISS
115Ø	Ø323	Ø323	Ø311	Ø323		
1154	Ø323	Ø311	Ø32Ø	Ø32Ø		

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1160    Ø311  Ø24Ø  Ø6Ø6  Ø314      –    LA
1164    Ø317  Ø325  Ø311  Ø323
117Ø    Ø311  Ø3Ø1  Ø316  Ø3Ø1
1174    Ø24Ø  Ø611  Ø317  Ø313      –    OKLA
12ØØ    Ø314  Ø3Ø1  Ø31Ø  Ø317
12Ø4    Ø315  Ø3Ø1  Ø24Ø  Ø611
121Ø    Ø315  Ø311  Ø316  Ø316      –    MINN
1214    Ø3Ø5  Ø323  Ø317  Ø324
122Ø    Ø3Ø1  Ø24Ø  Ø617  Ø31Ø      –    HAWAII
1224    Ø3Ø1  Ø327  Ø3Ø1  Ø311
123Ø    Ø311  Ø24Ø  Ø6Ø6  Ø327      –    WYO
1234    Ø331  Ø317  Ø315  Ø311
124Ø    Ø316  Ø3Ø7  Ø24Ø  Ø611
1244    Ø3Ø3  Ø317  Ø316  Ø316      –    CONN
125Ø    Ø3Ø5  Ø3Ø3  Ø324  Ø311
1254    Ø3Ø3  Ø325  Ø324  Ø24Ø
126Ø    Ø6Ø6  Ø3Ø4  Ø3Ø5  Ø314      –    DEL
1264    Ø3Ø1  Ø327  Ø3Ø1  Ø322
127Ø    Ø3Ø5  Ø24Ø  Ø617  Ø315      –    MD
1274    Ø3Ø1  Ø322  Ø331  Ø314
13ØØ    Ø3Ø1  Ø316  Ø3Ø4  Ø24Ø
13Ø4    Ø617  Ø315  Ø3Ø1  Ø311      –    MAINE
131Ø    Ø316  Ø3Ø5  Ø24Ø  Ø617
1314    Ø317  Ø31Ø  Ø311  Ø317      –    OHIO
132Ø    Ø24Ø  Ø617  Ø325  Ø324      –    UTAH
1324    Ø3Ø1  Ø31Ø  Ø24Ø  Ø617
133Ø    Ø311  Ø3Ø4  Ø3Ø1  Ø31Ø      –    IDA
1334    Ø317  Ø24Ø  Ø617  Ø3Ø4      –    DUMB
134Ø    Ø325  Ø315  Ø3Ø2  Ø24Ø
1344    Ø6Ø3  ØØØØ
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