

รายการอ้างอิง

ภาษาไทย

วิชุด ปุณวัตร. โปรแกรมคอมพิวเตอร์ภาษาอาร์พีจี. กรุงเทพมหานคร:

บ.ซีเอ็ดยูเคชั่น จำกัด, 2521

_____ และคณะ. ตำราภาษาไทยการเขียนโปรแกรมอาร์พีจี/400. กรุงเทพมหานคร:

บริษัท เอ.อาร์.อินฟอร์เมชันแอนพับลิเคชัน จำกัด, 2535

ภาษาอังกฤษ

Alen S.Fisher. CASE:Using Software Development Tools. Canada:

John Wiley & Sons, 1991

Gray B. Shelly, Thmas J. Chashman, Hal Goodwin, RPG II,RPGIII,AND RPG/400.

Boston : Boyd & Fraser Publishing Company, 1990

Herbert Schildt. C++:The Complete Reference. California : Osborn/McGraw-Hill, 1991

Kris Jamsa,Ph.D. Success with C++. Las Vegas NV : Jamsa Press, 1994

International Business Machine Corporation. Programing with RPG II. U.S.A. :

File Number S36-28

_____. Create Display: Screen Design Aids and System Support Program. U.S.A. : File

Number S36-36

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

ภาคผนวก ก

แบบฟอร์มที่ใช้ในภาษาอาร์ทีจีและข้อกำหนดของจอภาพ



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

IBM International Business Machines Corporation

RPG CONTROL AND FILE DESCRIPTION SPECIFICATIONS

GX71-9002 UM-050
Printed in U.S.A.

Program	Keying Information	Graphic Key	Card Element Number
Programmer	Date		

Page 1 of 2
Program Identification 75 76 77 78 79 80

Control Specifications

For the valid entries for a system, refer to the RPG reference manual for that system.

Line	From	To	Field Name
1	1	2	File Type
3	3	4	Size in Copies
5	5	6	Object Output
7	7	8	Listing Options
9	9	10	Size in Entries
11	11	12	Printing
13	13	14	Reserved
15	15	16	Currency Symbol
17	17	18	Date Format
19	19	20	Time Edit
21	21	22	Number of Pages
23	23	24	Number of Pages
25	25	26	Number of Pages
27	27	28	Reserved
29	29	30	Reserved
31	31	32	Reserved
33	33	34	Reserved
35	35	36	Reserved
37	37	38	Reserved
39	39	40	Reserved
41	41	42	Reserved
43	43	44	Reserved
45	45	46	Reserved
47	47	48	Reserved
49	49	50	Reserved
51	51	52	Reserved
53	53	54	Reserved
55	55	56	Reserved
57	57	58	Reserved
59	59	60	Reserved
61	61	62	Reserved
63	63	64	Reserved
65	65	66	Reserved
67	67	68	Reserved
69	69	70	Reserved
71	71	72	Reserved
73	73	74	Reserved
75	75	76	Reserved
77	77	78	Reserved
79	79	80	Reserved

File Description Specifications

For the valid entries for a system, refer to the RPG reference manual for that system.

Line	From	To	Field Name
1	1	2	File Type
3	3	4	File Name
5	5	6	File Designation
7	7	8	End of File
9	9	10	Sequence
11	11	12	File Format
13	13	14	Block Length
15	15	16	Record Length
17	17	18	External Record Name
19	19	20	Length of File Field or of Record Address Field
21	21	22	Record Address Type
23	23	24	Type of File Organization or Additional Area
25	25	26	Overflow Indicator
27	27	28	Key Field Starting Location
29	29	30	External Code (E)
31	31	32	Device
33	33	34	Symbolic Device
35	35	36	Symbolic Device
37	37	38	Symbolic Device
39	39	40	Symbolic Device
41	41	42	Symbolic Device
43	43	44	Symbolic Device
45	45	46	Symbolic Device
47	47	48	Symbolic Device
49	49	50	Symbolic Device
51	51	52	Symbolic Device
53	53	54	Symbolic Device
55	55	56	Symbolic Device
57	57	58	Symbolic Device
59	59	60	Symbolic Device
61	61	62	Symbolic Device
63	63	64	Symbolic Device
65	65	66	Symbolic Device
67	67	68	Symbolic Device
69	69	70	Symbolic Device
71	71	72	Symbolic Device
73	73	74	Symbolic Device
75	75	76	Symbolic Device
77	77	78	Symbolic Device
79	79	80	Symbolic Device

*Number of sheets per job may vary slightly.

แบบฟอร์ม H และ F

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

IBM
International Business Machines Corporation

RPG EXTENSION AND LINE COUNTER SPECIFICATIONS

GX21 9091 UM 090
Printed in U.S.A.

Program		Keying Instruction	Graphic Key	Card Electro Number
Programmer	Date			

Page of Program Identification

Extension Specifications

Line	From File	Record Sequence of the Chaining Field		To Filename	Table or Array Name	Number of Entries Per Record	Number of Entries Per Table or Array	Length of Entry	P/S/L/R Divisional Prefixes Separates (A/D)	Table or Array Name (Alternative Format)	Length of Entry	P/S/L/R Divisional Prefixes Separates (A/D)	Comments
		Number of the Chaining Field	From Filename										
0 1	C												
0 2	E												
0 3	E												
0 4	E												
0 5	E												
0 6	E												
0 7	E												
0 8	E												
	E												
	E												

Line Counter Specifications

Line	From File	Filename	Line Counter Specifications															
			1	2	3	4	5	6	7	8	9	10	11	12				
1 1	L		Line Number	1st or Channel Number	Line Number	DL or Channel Number	Line Number	Channel Number	Line Number	Channel Number	Line Number	Channel Number	Line Number	Channel Number	Line Number	Channel Number	Line Number	Channel Number
1 2	L																	
	L																	

แบบฟอร์ม E และ L

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

IBM International Business Machines Corporation

RPG CALCULATION SPECIFICATIONS

GX21 0003 UM050*
Printed in U.S.A.

Program	Keying Instruction	Graphic Key	Card Electro Number
Programmer	Date		

Page 1 2 of _____

Program Identification 75 76 77 78 79 80

Line	Form Type L.R. S.R. J.A.O.R.	Indicators			Factor 1	Operation	Factor 2	Result Field		Decimal Positions Plus Adjust (H)	Rounding Indicators			Comments
		Acc	Acc	Acc				Name	Length		Plus	Minus	Zero	
01	C													
02	C													
03	C													
04	C													
05	C													
06	C													
07	C													
08	C													
09	C													
10	C													
11	C													
12	C													
13	C													
14	C													
15	C													
16	C													
17	C													
18	C													
19	C													
20	C													

*Number of sheets per pad may vary slightly.

แบบฟอร์ม C

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

IBM International Business Machines Corporation

RPG OUTPUT SPECIFICATIONS

GX21-9090 UM1000*
Printed in U.S.A.

Program	Keying Instruction	Graphic Key	Card Electro Number
Programmer	Date		

Page 1 of 2
Program Identification

Line	Form Type	Filename or Record Name	Type INDICATOR			Space	Skip	Output Indicators			Field Name or EXCPT Name	End Position in Output Record	End Column	End Row	End Value	Constant or Edit Word				
			0	1	2			And	And	Comma						Zero Balance to Point	No Sign	CR	-	X - Remove Plus Sign
1	O																			
2	O																			
3	O																			
4	O																			
5	O																			
6	O																			
7	O																			
8	O																			
9	O																			
10	O																			
11	O																			
12	O																			
13	O																			
14	O																			
15	O																			
16	O																			
17	O																			
18	O																			
19	O																			
20	O																			

แบบฟอร์ม O

ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

ภาคผนวก ข

โปรแกรมภาษาอาร์พีจีและข้อกำหนดของจอภาพที่โปรแกรมสร้างขึ้น



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

// COPY LIBRARY-S,NAME-EMP, SUB-RPG

```

H
F*-----EMP
F* Object : Data Dictionary
F* Name : MAEMP employee mast
F*-----
FMAEMP UC F 66 66R 5AI 1 DISK A
FWS CD F 122 WORKSTN
F
E*--- ERROR MSG ---*
E #MS 1 9 48
I*-----
I* Object : Data Dictionary
I* Name : MAEMP employee mast
I*-----
IMAEMP NS
I 1 5 CODE
I 6 55 NAME
I 56 56 SEX
I 57 58 RATE
I 59 662SALARY
I*--- SCREEN 005
IWS NS 1 C0 2 C0 3 C5
I 4 8 CODE
I*--- SCREEN 008
IWS NS 1 C0 2 C0 3 C8
I 4 53 NAME
I 54 54 SEX
I 55 622SALARY
I*--- SCREEN 013
IWS NS 1 C0 2 C1 3 C3
I 4 8 CODE
I 9 58 NAME
I 59 59 SEX
I 60 672SALARY
I*-----
I* Object : Data Structure
I* Name : EMP emp variable
I*-----
I DS
I 1 82SAL#YR
I 9 58 ERRMSG
I 59 64 MODE
C*--- MAIN PROGRAM ---*
C MOVE 'N' #FOUND 1
C MOVE 'Y' #EOF 1
C MOVE 'N' #WVERR 1
C EXSR S01
C SETON LR
C*-----
C* Object : Screen
C* Name : S01 first screen
C*-----
C S01 BEGSR
C*--- PRE SCREEN
C 1 DOWEQ1
C*--- BEFORE SCREEN
C 12 MULT SALARY SAL#YR
C MOVE'EDIT' MODE
C*--- CALL SCREEN
C EXCPT#WS005
C READ WS
C MOVE'N' #WVERR
C SETOF 98
C*--- TERMINATE / NON VALIDATE SCREEN
C KB DO
C EXSR S03
C GOTO #WL005
C END
C KG DO
C GOTO #WE005
C END
C*--- VALIDATE SCREEN
C*CODE
C #WVERR IFEQ 'N'

```

```

C          SETOF                99
C          CHAINMAEMP          99
C 99      CODE                 MOVE 'N'      #FOUND
C N99     #FOUND              MOVE 'Y'      #FOUND
C          IFEQ 'N'
C          MOVE *BLANK        NAME
C          MOVE *BLANK        SEX
C          Z-ADDO             SALARY
C*        ERRMSG             MSG INVALID EMPLOYEE CODE
C          MOVEL#MS,2         ERRMSG
C          MOVE 'Y'          #WVERR
C          SETON                98
C          END
C          END
C*-- PROCESS SCREEN
C          #WVERR             IFEQ 'N'
C          KA                 DO
C                               EXSR S02
C                               GOTO #WL005
C                               END
C          KD                 DO
C                               EXSR DELETE
C                               GOTO #WL005
C                               END
C                               END
C          #WL005             TAG
C                               END
C          #WE005             TAG
C*-- POST SCREEN
C          ENDSR
C-----
C* Object : Screen
C* Name : S02      edit screen
C-----
C          S02                BEGSR
C*-- PRE SCREEN
C          1                   DOWEQ1
C*-- BEFORE SCREEN
C          12                  MULT SALARY      SAL#YR
C                               MOVEL'EDIT'    MODE
C*-- CALL SCREEN
C          EXCPT#WS008
C          READ WS
C          MOVEL'N'            #WVERR
C          SETOF                98
C*-- TERMINATE / NON VALIDATE SCREEN
C          KA                 DO
C                               EXSR SAVE
C                               GOTO #WE008
C                               END
C          KC                 DO
C                               GOTO #WE008
C                               END
C*-- VALIDATE SCREEN
C*NAME
C          #WVERR             IFEQ 'N'
C          NAME               IFEQ *BLANK
C*        ERRMSG             MSG NAME COULD NOT BE BLANK
C          MOVEL#MS,3         ERRMSG
C          MOVE 'Y'          #WVERR
C          SETON                98
C          END
C          END
C*SEX
C          #WVERR             IFEQ 'N'
C          SEX                IFNE 'M'
C          SEX                IFNE 'F'
C*        ERRMSG             MSG SEX MUST BE (M)ALE OR (F)EMALE
C          MOVEL#MS,4         ERRMSG
C          MOVE 'Y'          #WVERR
C          SETON                98
C          END
C          END
C          END
C*SALARY
C          #WVERR             IFEQ 'N'
C          SALARY             IFLE *ZERO

```

```

C*          ERRMSG      MSG SALARY MUST MORE THAN 0
C          MOVE#MS,5      ERRMSG
C          MOVE 'Y'      #WVERR
C          SETON
C          END          98
C          END
C*-- PROCESS SCREEN
C          #WVERR      IFEQ 'N'
C          END
C          #WL008      TAG
C          END
C          #WE008      TAG
C*-- POST SCREEN
C          ENDSR
C-----
C* Object : Screen
C* Name : S03      new screen
C-----
C          S03      BEGSR
C*-- PRE SCREEN
C          1      DOWEQ1
C*-- BEFORE SCREEN
C          12      MULT SALARY      SAL#YR
C          MOVE#EDIT'      MODE
C*-- CALL SCREEN
C          EXCPT#WS013
C          READ WS
C          MOVE#N'      #WVERR
C          SETOF          98
C*-- TERMINATE / NON VALIDATE SCREEN
C          KC      DO
C          GOTO #WE013
C          END
C*-- VALIDATE SCREEN
C*CODE
C          #WVERR      IFEQ 'N'
C          SETOF          99
C          CODE      CHAINMAEMP      99
C          99      MOVE 'N'      #FOUND
C          N99      MOVE 'Y'      #FOUND
C          #FOUND      IFEQ 'Y'
C*          ERRMSG      MSG DUPLICATE DATA
C          MOVE#MS,6      ERRMSG
C          MOVE 'Y'      #WVERR
C          SETON          98
C          END
C          END
C*NAME
C          #WVERR      IFEQ 'N'
C          NAME      IFEQ *BLANK
C*          ERRMSG      MSG NAME COULD NOT BE BLANK
C          MOVE#MS,7      ERRMSG
C          MOVE 'Y'      #WVERR
C          SETON          98
C          END
C          END
C*SEX
C          #WVERR      IFEQ 'N'
C          SEX      IFNE 'M'
C          SEX      IFNE 'F'
C*          ERRMSG      MSG SEX MUST BE (M)ALE OR (F)EMALE
C          MOVE#MS,8      ERRMSG
C          MOVE 'Y'      #WVERR
C          SETON          98
C          END
C          END
C          END
C*SALARY
C          #WVERR      IFEQ 'N'
C          SALARY      IFLE *ZERO
C*          ERRMSG      MSG SALARY MUST MORE THAN 0
C          MOVE#MS,9      ERRMSG
C          MOVE 'Y'      #WVERR
C          SETON          98
C          END
C          END
C*-- PROCESS SCREEN

```

```

C      #WVERR      IFEQ 'N'
C      KA          DO
C                  EXSR SAVE
C                  GOTO #WL013
C                  END
C                  END
C      #WL013     TAG
C                  END
C      #WE013     TAG
C*-- POST SCREEN
C                  ENDSR
C-----
C* Object : Routine
C* Name : DELETE delete data
C-----
C      DELETE     BEGSR
C      #FOUND     IFEQ 'Y'
C                  DEL MAEMP                DELETE EMP RECORD
C                  EXCPT#FD004
C                  ELSE
C*      ERRMSG    MSG NODATA FOUND CAN'T DELETE
C                  MOVE#MS,1      ERRMSG
C                  MOVE 'Y'      #WVERR
C                  SETON                98
C                  END
C                  ENDSR
C-----
C* Object : Routine
C* Name : SAVE save data
C-----
C      SAVE       BEGSR
C      #FOUND     IFEQ 'Y'
C                  UPDATMAEMP            UPDATE EMP FILE
C                  EXCPT#FU004
C                  ELSE
C*      WRITE MAEMP            ADD NEW EMP FILE
C                  EXCPT#FA004
C                  END
C                  ENDSR
C-----
O* Object : Data Dictionary
O* Name : MAEMP employee mast
O-----
OMAEMP  EADD      #FA004
O                  CODE          5
O                  NAME          55
O                  SEX           56
O                  RATE          58
O                  SALARY        66
OMAEMP  E         #FU004
O                  NAME          55
O                  SEX           56
O                  RATE          58
O                  SALARY        66
OMAEMP  EDEL      #FD004
O-----
O* Object : Screen
O* Name : S01 first screen
O-----
OWS     E         #WS005
O                  K6 'S01
O                  CODE          5
O                  NAME          55
O                  SEX           56
O                  SALARY        64
O                  SAL#YR        72
O                  ERRMSG B 122
O-----
O* Object : Screen
O* Name : S02 edit screen
O-----
OWS     E         #WS008
O                  K6 'S02
O                  CODE          5
O                  NAME          55
O                  SEX           56
O                  SALARY        64

```

O SAL#YR 72
 O ERRMSG B 122

O* Object : Screen
 O* Name : S03 new screen

OWS E #WS013 K6 'S03 '
 O CODE 5
 O NAME 55
 O SEX 56
 O SALARY 64
 O SAL#YR 72
 O ERRMSG B 122

** ERROR MESSAGE
 NODATA FOUND CAN'T DELETE
 INVALID EMPLOYEE CODE
 NAME COULD NOT BE BLANK
 SEX MUST BE (M)ALE OR (F)EMALE
 SALARY MUST MORE THAN 0
 DUPLICATE DATA
 NAME COULD NOT BE BLANK
 SEX MUST BE (M)ALE OR (F)EMALE
 SALARY MUST MORE THAN 0
 // CEND

// COPY LIBRARY-S,NAME-EMPFM,SUB-FMT

SS01	124	98 Y				ABDG
D	3 1 2Y	Y	Y	Y		C005
D	21 230Y			Y		CEMPLOYEE MASTER ENTRY
D	79 3 2Y					C-----X

D	8 513Y			Y		CEMPLOYEE
D	6 616Y					CCODE :
DCODE	5 623Y	Y	Y	Y		
D	6 716Y					CNAME :
DNAME	50 723Y					
D	5 817Y					CSEX :
DSEX	1 823Y					
D	8 825Y					C(M OR F)
D	8 914Y					CSALARY :
DSALARY	8 923Y					
D	1910 3Y					CTOTAL YEAR SALARY :
DSAL#YR	81023Y			Y		
D	7922 2Y					C-----X

D	72310Y					CF1-EDIT
D	62325Y					CF2-NEW
D	92338Y					CF4-DELETE
D	72360Y					CF7-EXIT
DERRMSG	502417Y					
SS02	124	98 Y				AC
D	3 1 2Y	Y	Y	Y		C008
D	21 230Y			Y		CEMPLOYEE MASTER ENTRY
D	4 274Y					CEDIT
D	79 3 2Y					C-----X

D	8 513Y			Y		CEMPLOYEE
D	6 616Y					CCODE :
DCODE	5 623Y			Y		
D	6 716Y					CNAME :
DNAME	50 723Y	Y		Y		
D	5 817Y					CSEX :
DSEX	1 823Y	Y		Y		
D	8 825Y					C(M OR F)
D	8 914Y					CSALARY :
DSALARY	8 923Y	YN	B		Y	
D	1910 3Y					CTOTAL YEAR SALARY :
DSAL#YR	81023Y			Y	Y	
D	7922 2Y					C-----X

D	72310Y					CF1-SAVE
D	112361Y					CF3-PREVIOUS
DERRMSG	502417Y					
SS03	124	98 Y				AC
D	3 1 2Y	Y	Y	Y		C013
D	21 230Y			Y		CEMPLOYEE MASTER ENTRY
D	3 274Y			Y		CADD

```

D          79 3 2Y          C-----X
D-----
D          8 513Y          Y      CEMPLOYEE
D          6 616Y          CCODE :
DCODE      5 623Y  Y          Y      CNAME :
D          6 716Y          CSEX :
DNAME      50 723Y  Y          Y      C(M OR F)
D          5 817Y          CSALARY :
DSEX       1 823Y  Y          Y      CTOTAL YEAR SALARY :
D          8 825Y          Y Y
D          8 914Y          Y Y
DSALARY    8 923Y  YN  B          Y Y
D          1910 3Y          C-----X
DSAL#YR    81023Y
D          .7922 2Y
D-----
D          72310Y          CF1-SAVE
D          112361Y          CF3-PREVIOUS
DERRMSG    502417Y
// CEND

```



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย

ภาคผนวก ค

ข้อมูลของโปรแกรมจรรยาบรรณ EMP ที่สำรองไว้



ศูนย์วิทยทรัพยากร
จุฬาลงกรณ์มหาวิทยาลัย


```

NAME=EMP
INFO=Employee entry
MAIN=S01
[PG]
NAME=DELETE
INFO=delete data
      C          #FOUND      IFEQ 'Y'
      C          DEL      MAEMP          DELETE EMP RECORD
      C          ELSE
      C          ERRMSG      MSG      NODATA FOUND CAN'T DELETE
      C          END
[DS]
NAME=EMP
INFO=emp variable
SAL#YR1 82      YEARLY SALARY
ERRMSG0 500      ERROR MESSAGE
MODE 0 60      ADD EDIT DELET
[DD]
NAME=MAEMP
INFO=employee mast
*CODE 0 50      EMP CODE
NAME 0 500      EMP NAME
SEX 0 10      SEX(M/F)
RATE 0 20      EMP RATE
SALARY1 82      SALARY/MONTH
[WS]
NAME=S01
INFO=first screen
T 1291000000EMPLOYEE MASTER ENTRY
T 2 1000000-----
-----
T 4121000000EMPLOYEE
T 5150000000CODE :
V 522010001CODE 10
A C          CODE      CHAINMAEMP
A C          #FOUND      IFEQ 'N'
A C          MOVE *BLANK      NAME
A C          MOVE *BLANK      SEX
A C          Z-ADDO      SALARY
A C          ERRMSG      MSG      INVALID EMPLOYEE CODE
A C          END
T 6150000000NAME :
V 6220000000NAME 00
T 7160000000SEX :
V 7220000000SEX 00
T 7240000000(M OR F)
T 8130000000SALARY :
V 8220000000SALARY00
T 9 20000000TOTAL YEAR SALARY :
V 9220010000SAL#YR00
B C          12      MULT SALARY      SAL#YR
B C          MOVE'L'EDIT'      MODE
T21 1000000-----
-----
F22 9000000 110S02      F1-EDIT
F2224000000 200S03      F2-NEW
F2237000000 410DELETEF4-DELETE
F2259000000 701      F7-EXIT .
V23160000000ERRMSG01
[WS]
NAME=S02
INFO=edit screen
T 1291000000EMPLOYEE MASTER ENTRY
T 1730000000EDIT
T 2 1000000-----
-----
T 4121000000EMPLOYEE
T 5150000000CODE :
V 522000001CODE 00
T 6150000000NAME :
V 622000001NAME 10
A C          NAME      IFEQ *BLANK
A C          ERRMSG      MSG      NAME COULD NOT BE BLANK
A C          END
T 7160000000SEX :

```

```

V 722000001SEX 10
A C SEX IFNE 'M'
A C SEX IFNE 'F'
A C ERRMSG MSG SEX MUST BE (M)ALE OR (F)EMALE
A C END
A C END
T 724000000(M OR F)
T 813000000SALARY :
V 822000001SALARY10
A C SALARY IFLE *ZERO
A C ERRMSG MSG SALARY MUST MORE THAN 0
A C END
T 9 2000000TOTAL YEAR SALARY :
V 922001001SAL#YR00
B C 12 MULT SALARY SAL#YR
B C MOVEL'EDIT' MODE
T21 1000000-----
-----
F22 9000000 111SAVE F1-SAVE
F2260000000 301 F3-PREVIOUS
V23160000000ERRMSG01
[WS]
NAME=S03
INFO=new screen
T 1291000000EMPLOYEE MASTER ENTRY
T 173000010ADD
T 2 1000000-----
-----
T 4121000000EMPLOYEE
T 5150000000CODE :
V 522000001CODE 10
A C CODE CHAINMAEMP
A C #FOUND IFEQ 'Y'
A C ERRMSG MSG DUPLICATE DATA
A C END
T 6150000000NAME :
V 622000001NAME 10
A C NAME IFEQ *BLANK
A C ERRMSG MSG NAME COULD NOT BE BLANK
A C END
T 7160000000SEX :
V 722000001SEX 10
A C SEX IFNE 'M'
A C SEX IFNE 'F'
A C ERRMSG MSG SEX MUST BE (M)ALE OR (F)EMALE
A C END
A C END
T 724000000(M OR F)
T 813000000SALARY :
V 822000001SALARY10
A C SALARY IFLE *ZERO
A C ERRMSG MSG SALARY MUST MORE THAN 0
A C END
T 9 2000000TOTAL YEAR SALARY :
V 922001001SAL#YR00
B C 12 MULT SALARY SAL#YR
B C MOVEL'EDIT' MODE
T21 1000000-----
-----
F22 9000000 110SAVE F1-SAVE
F2260000000 301 F3-PREVIOUS
V23160000000ERRMSG01
[PG]
NAME=SAVE
INFO=save data
C #FOUND IFEQ 'Y'
C UPDATMAEMP UPDATE EMP FILE
C ELSE
C WRITEMAEMP ADD NEW EMP FILE
C END

```

ประวัติผู้เขียน

นายชัยธนา สุภา เกิดวันที่ 25 กุมภาพันธ์ 2505 จังหวัดนครราชสีมา สำเร็จการศึกษาระดับปริญญาตรี ที่มหาวิทยาลัยรามคำแหง ภาควิชาบริหารธุรกิจ สาขาการบัญชี มหาวิทยาลัยรามคำแหง เมื่อปี พ.ศ. 2529 และเข้าศึกษาต่อในระดับปริญญาโท จุฬาลงกรณ์มหาวิทยาลัย เมื่อปี พ.ศ. 2535 ในสาขาวิชาวิทยาศาสตร์คอมพิวเตอร์ ภาควิชาวิศวกรรมคอมพิวเตอร์ คณะวิศวกรรมศาสตร์



ศูนย์วิทยพัทยาการ
จุฬาลงกรณ์มหาวิทยาลัย