

SYNCSORT

The Following is the list of activities that are performed by the SYNCSORT utility with examples:-

S.No	Member	Description
	COPY	Use of copy fields (similar to concat) Making a copy of the i/p dataset
	EDITING	Use of editable characters (masking, converting data to a printable format)
	INCLUDE	Usage of include fields Splitting i/p records into 2 files based on a cond
	INREC	Usage of inrec fields (similar to outrec)
	MERGE	Usage of merge fields (similar to sort fields)
	OMIT	Usage of omit fields Omitting fields with spaces & by giving specific value
	OUTFIL	Creating multiple copies of i/p file
	OUTREC	Usage of outrec fields (directing only required fields to output)
	REPORT	Sample report with many parameters are given here
	SUMFIELD	Summing numeric field by having control on a field which is repeating & equal in value
	SUMMARY	Creating summary report

COPY

*** USE OF COPY FIELDS**

*** SORT FIELDS=COPY COPIES INPUT TO OUTPUT**

```
//STEP01 EXEC PGM=SORT
//SORTIN      DD DSN=PGCN25.MERGE.IN,
//              DISP=SHR
//              DD DSN=PGCN25.MERGE.IN1,
//              DISP=SHR
//SORTOUT     DD DSN=PGCN25.MERGE.COPY.OUT,
//              DISP=(NEW,CATLG,DELETE),
//              DCB=(RECFM=FB,LRECL=16,BLKSIZE=0),
//              SPACE=(CYL,(4,1),RLSE)
//SYSIN DD *
SORT FIELDS=COPY
/*
//SYSOUT DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*END OF SORT
/*
```

PGCN25.MERGE.IN

```
----+----1
*****
A4  20000
C4  10000
G4  40000
L9  30000
N4  10000
*****
```

PGCN25.MERGE.IN1

```
----+----1
*****
A4  80000
G4  80000
H2  50000
L9  70000
N4  60000
*****
```

PGCN25.MERGE.COPY.OUT

```
----+----1
*****
A4  20000
C4  10000
G4  40000
L9  30000
N4  10000
A4  80000
G4  80000
H2  50000
L9  70000
N4  60000
*****
```

ELIMDUPL

***THIS JCL WILL REMOVE DUP RECORDS ***
***USE SORT FIELDS & SUM FIELDS=NONE TO ELIMINATE DUPLICATE RECORDS**
***NOTE: SORT KEY SHOULD INCLUDE THE WHOLE RECORD LENGTH**
*** SORT FIELDS=COPY WILL NOT WORK**

```
//STEP01 EXEC PGM=SORT
//SORTIN      DD DSN=PGCN25.ELIMDUPL.IN,
//              DISP=SHR
//SORTOUT     DD DSN=PGCN25.ELIMDUPL.OUT,
//              DISP=(NEW,CATLG,DELETE),
//              DCB=(RECFM=FB,LRECL=16,BLKSIZE=0),
//              SPACE=(CYL,(4,1),RLSE)
//SYSIN DD *
* SORT FIELDS SPECIFIED HERE TO SORT THE RECORDS
           SORT FIELDS=(1,9,CH,A)
* SUM FIELDS SPECIFIED HERE IS TO ELIMINATE DUPLICATE RECORDS
           SUM FIELDS=NONE
* END REPLACES /* TO END THE SYSIN
END
//SYSOUT DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*END OF SORT
```

PGCN25.ELIMDUPL.IN

```
-----+-----1
*****
N4  10000
N4  10000
C4  10000
C4  10000
A4  20000
*****
```

PGCN25.ELIMDUPL.OUT

```
-----+-----1
*****
A4  20000
C4  10000
N4  10000
*****
```

INCLUDE

```
*****
*   A FIELD CAN BE COMPARED WITH A CONSTANT OR ANOTHER FIELD
*       UPTO 180 COMPARISONS CAN BE MADE
*   'AND' EXEUTES FIRST BEFORE 'OR'
*   USE BRACKETS TO PRIORITISE THE SELECTION
*****
```

```
//STEP01 EXEC PGM=SORT
//SORTIN DD DSN=PGCN25.INCLUDE.IN,DISP=SHR
//SORTOUT DD DSN=PGCN25.INCLUDE.OUT,
//          DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(1,1),RLSE),
//          DCB=(RECFM=FB,LRECL=30,BLKSIZE=0)
//SYSIN DD *
        SORT FIELDS=(1,2,BI,D)
        INCLUDE COND=(1,2,CH,EQ,C'A4',OR,19,2,ZD,GT,22,2,ZD,
                        OR,26,5,ZD,EQ,1000)
/*
//SYSOUT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
```

PGCN25.INCLUDE.IN

```
-----+-----1-----+-----2-----+-----3
*****
A4 20000 BOY          11 12  10000
C4 10000 APPLE        22 21  30000
FP 70000 DOG          33 34  50000
G1 80000 CAT          44 43  80000
G4 40000 FISH         55 56  40000
H2 50000 HEN          66 65  70000
L9 30000 ELEPHANT     77 78  60000
N4 10000 GUN          88 87  20000
N4 60000 INK          99 00  90000
*****
```

PGCN25.INCLUDE.OUT

```
-----+-----1-----+-----2-----+-----3
*****
N4 10000 GUN          88 87  20000
N4 60000 INK          99 00  90000
H2 50000 HEN          66 65  70000
G1 80000 CAT          44 43  80000
C4 10000 APPLE        22 21  30000
A4 20000 BOY          11 12  10000
*****
```

```

*****
* SEPARATES INPUT RECOR3 INTO 2 FILES BASED ON A CERTAIN COND
*****
//STEP02 EXEC PGM=3ORT
//SORTIN DD DSN=PGCN25.INCLUDE.IN,DISP=SHR
//SORTOF01 DD DSN=PGCN25.INCLUDE.OUT1,
//          DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(1,1),RLSE),
//          DCB=(RECFM=FB,LRECL=30,BLKSIZE=0)
//*
//SORTOF02 DD DSN=PGCN25.INCLUDE.OUT2,
//          DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(1,1),RLSE),
//          DCB=(RECFM=FB,LRECL=30,BLKSIZE=0)
//*
//SYSIN DD *
          SORT FIELDS=(1,2,BI,D)
          OUTFIL FILES=(01),INCLUDE=(19,2,ZD,GT,22,2,ZD)
          OUTFIL FILES=(02),INCLUDE=(19,2,ZD,LT,22,2,ZD)
/*
//SYSOUT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*

```

PGCN25.INCLUDE.OUT1

```

-----+-----1-----+-----2-----+-----3
*****
N4 10000 GUN      88 87  20000
N4 60000 INK      99 00  90000
H2 50000 HEN      66 65  70000
G1 80000 CAT      44 43  80000
C4 10000 APPLE    22 21  30000
*****

```

PGCN25.INCLUDE.OUT2

```

-----+-----1-----+-----2-----+-----3
*****
L9 30000 ELEPHANT 77 78  60000
G4 40000 FISH     55 56  40000
FP 70000 DOG      33 34  50000
A4 20000 BOY      11 12  10000
*****

```

INREC

*SINCE SORT FIELDS PARAMETER IS EXECUTED AFTER THE EXECUTION OF INREC
*FIELDS ...THE POSITION 1,5,ZD DENOTES THE O/P FILE
*
*NOTE: THIS JCL IS ONLY FOR FOR RECFM = FB
*INREC FIELDS IS SIMILAR TO OUTREC FIELDS BUT IT WILL BE EXECUTED
*BEFORE SORT,SUM OR OUTREC STMT. THUS IT IMPROVES I/O PERFORMANCE
*IF YOU ARE SORTING A LARGE VOLUME OF RECORDS.

```
//STEP01 EXEC PGM=SORT
//SORTIN DD DSN=PGCN25.INREC.IN,DISP=SHR
//SORTOUT DD DSN=PGCN25.INREC.OUT,
//          DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(1,1),RLSE),
//          DCB=(RECFM=FB,LRECL=5,BLKSIZE=0)
//SYSIN DD *
          SORT FIELDS=(1,5,ZD,A)
          INREC FIELDS=(1:3,5)
/*
//SYSOUT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
```

PGCN25.INREC.IN

```
-----+-----1-----+-
*****
A420000 00000100
C410000 00000200
FP70000 00000300
G180000 00000400
G440000 00000500
H250000 00000600
L930000 00000700
N410000 00000800
N460000 00000900
*****
```

PGCN25.INREC.OUT

```
-----+-----1
*****
10000
10000
20000
30000
40000
50000
60000
70000
80000
*****
```

MERGE (Input files are Presorted)

*** MERGE IS USED FOR CONCATENATING DATASETS**

*** NOTE: IF YOU WANT USE ANY KEY , WE HAVE TO KEEP THE I/P DATASETS**

*** IN THE SORTED ORDER.ALSO WE CAN USE INCLUDE/INREC**

```
//SORTIN01 DD DSN=PGCN25.MERGE.IN,
//          DISP=SHR
//SORTIN02 DD DSN=PGCN25.MERGE.IN1,
//          DISP=SHR
//SORTOUT DD DSN=PGCN25.MERGE.OUT,
//          DISP=(NEW,CATLG,DELETE),
//          DCB=(RECFM=FB,LRECL=5,BLKSIZE=0),
//          SPACE=(CYL,(4,1),RLSE)
//SYSIN DD *
MERGE FIELDS=(1,2,CH,A)
OMIT COND=(1,2,CH,EQ,C'A4')
OUTREC FIELDS=(1:5,5)
/*
//SYSOUT DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*END OF SORT
```

PGCN25.MERGE.IN

```
----+----1
*****
A4  20000
C4  10000
G4  40000
L9  30000
N4  10000
*****
```

PGCN25.MERGE.IN1

```
----+----1-
*****
A4  80000
G4  80000
H2  50000
L9  70000
N4  60000
*****
```

PGCN25.MERGE.OUT

```
----+----1
*****
10000
40000
30000
10000
80000
50000
70000
60000
.....
```

- * SKIPREC SKIP CERTAIN RECORDS FROM THE FIRST
- * STOPAFT STOPS AFTER CERTAIN RECORDS AFTER SKIPREC/OMIT ETC
- NOTE: COULD BE USED ONLY FOR MERGE FIELDS=COPY

```
//STEP02 EXEC PGM=SORT
//SORTIN      DD DSN=PGCN25.MERGE.IN,
//            DISP=SHR
//SORTOUT     DD DSN=PGCN25.MERGE.OUT1,
//            DISP=(NEW,CATLG,DELETE),
//            DCB=(RECFM=FB,LRECL=16,BLKSIZE=0),
//            SPACE=(CYL,(4,1),RLSE)
//SYSIN DD *
            SORT FIELDS=COPY,SKIPREC=2,STOPAFT=2
/*
//SYSOUT DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*END OF SORT
```

PGCN25.MERGE.IN

```
-----+-----1
*****
A4  20000
C4  10000
G4  40000
L9  30000
N4  10000
*****
```

PGCN25.MERGE.OUT1

```
-----+-----1
*****
G4  40000
L9  30000
*****
```


MERGE

**MERGE statement MERGES THE EQUAL KEYED RECORDS
COULD BE USED WITH SUM FIELDS TO SUM FIELDS WITH EQUAL KEY
HERE MULTIPLE FILES COULD BE MERGED UNLIKE SORT FIELDS WITH SUM
AND INPUT FILES SHOULD BE IN SORTED KEY ORDER**

```
//STEP01 EXEC PGM=SORT
//SORTIN01 DD DSN=PGCN25.MERGEEQ.IN,
//          DISP=SHR
//SORTIN02 DD DSN=PGCN25.MERGEEQ.IN1,
//          DISP=SHR
//SORTOUT DD DSN=PGCN25.MERGENEQ.OUT,
//          DISP=(NEW,CATLG,DELETE),
//          DCB=(RECFM=FB,LRECL=10,BLKSIZE=0),
//          SPACE=(CYL,(4,1),RLSE)
//SYSIN DD *
//          MERGE FIELDS=(1,2,CH,A)
//          /*
//SYSOUT DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*END OF SORT
```

PGCN25.MERGEEQ.IN

```
-----+-----1
*****
A4  200000
C4  200000
G4  400000
L9  300000
N4  100000
*****
```

PGCN25.MERGEEQ.IN1

```
-----+-----1
*****
C4  300000
G4  200000
L9  200000
N4  300000
Z1  400000
*****
```

PGCN25.MERGENEQ.OUT

```
-----+-----1
*****
A4  200000
C4  200000
C4  300000
G4  400000
G4  200000
L9  300000
L9  200000
N4  100000
N4  300000
Z1  400000
*****
```

OMIT

```
*****
*   A FIELD CAN BE COMPARED WITH A CONSTANT OR ANOTHER FIELD
*   UPTO 180 COMPARISONS CAN BE MADE
*   'AND' EXEUTES FIRST BEFORE 'OR'
*   USE BRACKETS TO PRIORITISE THE SELECTION
*****
```

```
//STEP01 EXEC PGM=SORT
//SORTIN DD DSN=PGCN25.OMIT.IN,DISP=SHR
//SORTOUT DD DSN=PGCN25.OMIT.OUT,
//          DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(1,1),RLSE),
//          DCB=(RECFM=FB,LRECL=30,BLKSIZE=0)
//SYSIN DD *
          SORT FIELDS=(1,2,BI,D)
          OMIT COND=(1,2,CH,EQ,C'A4',&,4,5,ZD,EQ,20000,|,
                    1,2,CH,EQ,C'G4',&,10,8,CH,EQ,C'FISH')
/*
//SYSOUT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
/*
```

PGCN25.OMIT.IN

```
----+----1----+----2----+----3
*****
A4 20000 BOY      11 12  10000
C4 10000 APPLE   22 21  30000
FP 70000 DOG     33 34  50000
G1 80000 CAT     44 43  80000
G4 40000 FISH    55 56  40000
H2 50000 HEN     66 65  70000
L9 30000 ELEPHANT 77 78  60000
N4 10000 GUN     88 87  20000
N4 60000 INK     99 00  90000
*****
```

PGCN25.OMIT.OUT

```
----+----1----+----2----+----3
*****
N4 10000 GUN     88 87  20000
N4 60000 INK     99 00  90000
L9 30000 ELEPHANT 77 78  60000
H2 50000 HEN     66 65  70000
G1 80000 CAT     44 43  80000
FP 70000 DOG     33 34  50000
C4 10000 APPLE   22 21  30000
*****
```

* HERE SPACES ARE REMOVED

* OMIT=NONE & INCLUDE=ALL CAN BE USED

.....

```
//STEP02 EXEC PGM=SORT
//SORTIN DD DSN=PGCN25.OMIT.IN1,DISP=SHR
//SORTOF01 DD DSN=PGCN25.OMIT.OUT1,
//          DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(1,1),RLSE),
//          DCB=(RECFM=FB,LRECL=30,BLKSIZE=0)
//*
//SORTOF02 DD DSN=PGCN25.OMIT.OUT2,
//          DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(1,1),RLSE),
//          DCB=(RECFM=FB,LRECL=30,BLKSIZE=0)
//*
//SORTOF03 DD DSN=PGCN25.OMIT.OUT3,
//          DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(1,1),RLSE),
//          DCB=(RECFM=FB,LRECL=30,BLKSIZE=0)
//*
//SYSIN DD *
        SORT FIELDS=(1,2,BI,D)
* TO REMOVE RECORDS WITH SPACES AT FIRST 2 BYTES
        OUTFIL FILES=(01),OMIT=(1,2,CH,EQ,C'  ')
* COPIES ALL I/P RECORDS TO O/P
        OUTFIL FILES=(02),OMIT=NONE
        OUTFIL FILES=(03),INCLUDE=ALL
/*
//SYSOUT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
```

PGCN25.OMIT.IN1

-----1-----2-----3

	20000	BOY	11 12	10000
C4	10000	APPLE	22 21	30000
FP	70000	DOG	33 34	50000
G1	80000	CAT	44 43	80000
	40000	FISH	55 56	40000
H2	50000	HEN	66 65	70000
L9	30000	ELEPHANT	77 78	60000
N4	10000	GUN	88 87	20000
	60000	INK	99 00	90000

PGCN25.OMIT.OUT1

-----1-----2-----3

N4	10000	GUN	88 87	20000
L9	30000	ELEPHANT	77 78	60000
H2	50000	HEN	66 65	70000
G1	80000	CAT	44 43	80000
FP	70000	DOG	33 34	50000
C4	10000	APPLE	22 21	30000

PGCN25.OMIT.OUT2

```
-----1-----2-----3
*****
N4 10000 GUN      88 87  20000
L9 30000 ELEPHANT 77 78  60000
H2 50000 HEN      66 65  70000
G1 80000 CAT      44 43  80000
FP 70000 DOG      33 34  50000
C4 10000 APPLE    22 21  30000
    20000 BOY     11 12  10000
    40000 FISH    55 56  40000
    60000 INK     99 00  90000
*****
```

PGCN25.OMIT.OUT3

```
-----1-----2-----3
*****
N4 10000 GUN      88 87  20000
L9 30000 ELEPHANT 77 78  60000
H2 50000 HEN      66 65  70000
G1 80000 CAT      44 43  80000
FP 70000 DOG      33 34  50000
C4 10000 APPLE    22 21  30000
    20000 BOY     11 12  10000
    40000 FISH    55 56  40000
    60000 INK     99 00  90000
*****
```

OUTFIL

WE CAN CREATE COPIES OF THE I/P FILE

```
//SORTIN      DD DSN=PGCN25.OUTFIL.IN,
//              DISP=SHR
//SORTOF01     DD DSN=PGCN25.OUTFIL.OUT,
//              DISP=(NEW,CATLG,DELETE),
//              DCB=(RECFM=FB,LRECL=16,BLKSIZE=0),
//              SPACE=(CYL,(4,1),RLSE)
//SORTOF02     DD DSN=PGCN25.OUTFIL.OUT1,
//              DISP=(NEW,CATLG,DELETE),
//              DCB=(RECFM=FB,LRECL=16,BLKSIZE=0),
//              SPACE=(CYL,(4,1),RLSE)
//SYSIN DD *
              SORT FIELDS=COPY
              OUTFIL FILES=(01,02)
/*
//SYSOUT DD SYSOUT=*
```

PGCN25.OUTFIL.IN

```
-----+-----
*****
A4  20000
C4  10000
FP  70000
FP  70000
*****
```

PGCN25.OUTFIL.OUT

```
-----+-----
*****
A4  20000
C4  10000
FP  70000
FP  70000
*****
```

PGCN25.OUTFIL.OUT1

```
-----+-----
*****
A4  20000
C4  10000
FP  70000
FP  70000
*****
```

OUTREC

SORT FIELDS = COPY CAN BE USED

NOTE: HERE SORT FIELDS WILL BE EXECUTED BEFORE THE EXECUTION OF
OUTREC FIELDS

```
//STEP01 EXEC PGM=SORT
//SORTIN DD DSN=PGCN25.OUTREC.IN,DISP=SHR
//SORTOUT DD DSN=PGCN25.OUTREC.OUT,
//          DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(1,1),RLSE),
//          DCB=(RECFM=FB,LRECL=2,BLKSIZE=0)
//SYSIN DD *
          SORT FIELDS=(1,2,CH,D)
          OUTREC FIELDS=(1:1,2)
/*
//SYSOUT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
```

PGCN25.OUTREC.IN

```
-----+-----1-----+
*****
A420000 00000100
C410000 00000200
FP70000 00000300
G180000 00000400
G440000 00000500
H250000 00000600
L930000 00000700
N410000 00000800
N460000 00000900
*****
```

PGCN25.OUTREC.OUT

```
-----+-----1-----+
*****
N4
N4
L9
H2
G4
G1
FP
C4
A4
*****
```

REPORT

* DATE PARM - 8 BYTES, PAGE PARM - 6 BYTES, X-SPACES
 * PAGE PARM COULD NOT BE DISPLAYED IN HEADER 1
 * HEADER 1 - REPORT TITLE HEADER 2 - FIELD HEADING
 * HEADER 3 - SECTION HEADING
 * LINES=60 (DEFAULT LINES IN A PAGE)
 * SECTIONS PARM KEEP CONTROL ON 5 BYTE FIELD STARTING AT 4TH BYTE
 * TOT SUB PARM CALCULATES TOTALS FOR THE CONTROL FIELD
 * SUB PARM HAVE RUNNING TOTALS,SKIP=1L SKIP 1 LINE AFTER SECTION PARM
 * SKIP OR HEADER3 OR TRAILER3 IS MANDATORY FOR SECTION PARM *
 SKIP=P PUTS A PAGE BREAK WHEN THE CONTROL FIELD CHANGES

```
//STEP01 EXEC PGM=SORT
//SORTIN DD DSN=PGCN25.REPORT.IN,DISP=SHR
//SORTOUT DD DSN=PGCN25.REPORT.OUT,
//          DISP=(,CATLG,DELETE),
//          SPACE=(CYL,(1,1),RLSE),
//          DCB=(RECFM=FBA,LRECL=41,BLKSIZE=0)
//SYSIN DD *
      SORT FIELDS=(1,2,CH,A)
      OUTFIL OUTREC=(3:1,2,8:4,5,17:10,8,40:C' '),
      HEADER1=(2:&DATE,/,4X,
                8:'REPORT',/,
                8:'-----'),
      HEADER2=(7:'PAGE-',12:&PAGE,/,
                3:'CD#',
                8:'NO:',
                17:'ITEM',/,
                3:'---',
                8:'---',
                17:'----'),LINES=20,
      SECTIONS=(4,5,SKIP=1L,
                HEADER3=(3:'SECTION HEADER'),
                TRAILER3=(/,2:'TOTAL',TOT=(4,5,ZD,EDIT=($II,IIT))),
                TRAILER2=(1:'GRD-TOT',TOT=(4,5,ZD,EDIT=($II,IIT))),
                TRAILER1=(/,1:'TOTAL RECS',COUNT,/,
                3:'*** END OF REPORT ***')
/*
//SYSOUT DD SYSOUT=*
//SYSUDUMP DD SYSOUT=*
```

```
PGCN25.REPORT.IN
-----+-----1-----+-----2-----+-----3
*****
A4  1000 BOY          11 11  10000
C4  1000 APPLE        11 11  10000
FP  1000 DOG          11 11  10000
G1  1000 CAT          11 11  10000
G4 10000 FISH         12 11  10000
H2 10000 HEN          12 11  10000
L9 10000 ELEPHANT     12 11  10000
N4 10000 GUN          12 11  10000
N4 10000 INK          12 11  10000
*****
```

-----+-----1-----+-----2-----

07/04/01

REPORT

PAGE- 1
CD# NO: ITEM
--- --- ----

SECTION HEADER

A4	1000	BOY
C4	1000	APPLE
FP	1000	DOG
G1	1000	CAT

TOTAL \$4,000

SECTION HEADER

G4	10000	FISH
H2	10000	HEN
L9	10000	ELEPHANT
N4	10000	GUN
N4	10000	INK

TOTAL\$50,000
GRD-TOT\$54,000

TOTAL RECS 9
*** END OF REPORT ***

SUMFIELD

*USE SORT FIELDS TO HAVE A CONTROL ON A FIELD &

*& USE SUM FIELDS TO SUM CERTAIN FIELDS

*NOTE: ONLY THE FIRST ENTRY OF THE CONTROL FIELD WILL BE PRESENT

* IN THE OUTPUT IF IT IS NUMERIC OTHERWISE LIKE FIELDS WILL

* GET ADDED.

* WE CAN'T USE FIELDS=COPY & SUM FIELDS B'COZ COPY FIELDS SUPPRESS

* SUM FIELDS

```
//STEP01 EXEC PGM=SORT
```

```
//SORTIN DD DSN=PGCN25.SUM.IN,
```

```
// DISP=SHR
```

```
//SORTOUT DD DSN=PGCN25.SUM.OUT,
```

```
// DISP=(NEW,CATLG,DELETE),
```

```
// DCB=(RECFM=FB,LRECL=30,BLKSIZE=0),
```

```
// SPACE=(CYL,(4,1),RLSE)
```

```
//SYSIN DD *
```

* SORT FIELDS SPECIFIED HERE IS TO SORT THE RECORDS AND TO HAVE CONTROL

* ON A FIELD THAT IS EQUAL IN VALUE

```
SORT FIELDS=(1,2,CH,A)
```

* SUM FIELDS SPECIFIED HERE IS TO SUM THE FIELDS WITH EQUAL DATA OF THE

* CONTROL FIELD

```
SUM FIELDS=(4,5,ZD)
```

```
/*
```

```
//SYSOUT DD SYSOUT=*
```

```
//SYSPRINT DD SYSOUT=*
```

```
//*END OF SORT
```

PGCN25.SUM.IN

```
-----1-----2-----3
```

```
*****
```

```
A1 20000 BOY 11 12 10000
```

```
A1 10000 BOY 12 12 10000
```

```
B2 30000 DOG 11 34 50000
```

```
C3 30000 CAT 12 43 80000
```

```
B2 40000 DOG 12 34 50000
```

```
C3 50000 CAT 12 43 80000
```

```
D4 30000 ELEPHANT 11 78 60000
```

```
D4 10000 ELEPHANT 12 78 60000
```

```
D4 20000 ELEPHANT 11 78 60000
```

```
*****
```

PGCN25.SUM.OUT

```
-----1-----2-----3
```

```
*****
```

```
A1 30000 BOY 11 12 10000
```

```
B2 70000 DOG 11 34 50000
```

```
C3 80000 CAT 12 43 80000
```

```
D4 60000 ELEPHANT 11 78 60000
```

```
*****
```

SUMMARY

----- S U M M A R Y R E P O R T -----

USE SORT FIELDS TO HAVE A CONTROL ON A FIELD &

USE SUM FIELDS TO SUM ALL FIELDS OR USE TOT PARM TO TOTAL AND
DISPLAY IN A TRAILER.

NOTE: HAVE CONTROL ON A NUMERIC FIELD & USE SUM FIELDS,OUTREC FIELD
& TOTAL SHOULD NOT OVERFLOW THAN THE SPECIFIED LENGTH

```
//STEP01 EXEC PGM=SORT
//SORTIN      DD DSN=PGCN25.SUMMARY.IN,
//              DISP=SHR
//SORTOUT     DD DSN=PGCN25.SUMMARY.OUT,
//              DISP=(NEW,CATLG,DELETE),
//              DCB=(RECFM=FBA,LRECL=31,BLKSIZE=0),
//              SPACE=(CYL,(1,1),RLSE)
//SYSIN DD *
              SORT FIELDS=(2,1,ZD,A)
              SUM FIELDS=(4,2,7,2,11,5),FORMAT=ZD
              OUTFIL OUTREC=(3:4,2,10:7,2,17:11,5,30:C' '),
              HEADER1=(05:'SUMMARY REPORT',/,
              05:'-----',/),
              HEADER2=(3:'TOT1',10:'TOT2',17:'TOT5',/,
              3:'-----',10:'-----',17:'-----')
/*
//SYSOUT DD SYSOUT=*
//SYSPRINT DD SYSOUT=*
//*END OF SORT
```

PGCN25.SUMMARY.IN

```
-----+-----1-----+
*****
1 11 12 10000
1  2  2 10000
1 11  4 10000
1  2  3 10000
1 12  4 10000
1  2  3 10000
1 11  8 10000
1 12  8 10000
1 11  8 10000
*****
```

PGCN25.SUMMARY.OUT

```
-----+-----1-----+-----2-
*****
      SUMMARY REPORT
      -----

      TOT1    TOT2    TOT5
      ----    ----    ----
      74      52      90000
*****
```