Module 3

<u>Sorting Report Data</u>

This module will review the following commands:

- Ranked By

- In-Groups-Of

- Columns

- Rows

Supporting Documents/Files:

- FOCUS Documentation

- CIRS Data Element Dictionary

Overview

Sort commands enable you to display the report information grouped in a particular order. In earlier training, you learned how to organize the information by rows using the BY phrase and by columns using the ACROSS phrase.   In this module you will learn additional sorting options, including grouping numeric data into ranges, specifying your own sort order, and selecting data by rank.

Ranked By

When you sort report rows using the BY phrase, you can indicate the numeric rank of each row. Ranking sort field values is frequently combined with restricting sort field values by rank. The syntax is:

RANKED BY fieldname

- The sort field can be numeric or alphanumeric.

- Display commands must be stated before the sort phrase(s).

- You can restrict the sort field values by rank using the command HIGHEST # or LOWEST #, where # is the rank.

Ranked By Example

The report request below ranks monthly paid employees by their salary rate. By default, the data is sorted from low to high.

Report Request:

```
-* EMPLOYEES BY SALARY RANK
EX AC
TABLE FILE AC
PRINT AC:LASTNAME
RANKED BY AC:SALARY
IF AC:SALPER EQ M
END
```

Report Generated

```
RANK     AC:SALARY    LAST NAME
----     ---------    ---------
   1       $141.53    SARDINE
   2       $148.73    MONKEY
   3       $200.00    ARDVARK
           $200.00    PARAKET
   4       $232.00    TIGER
```

Ranked By Practice

Write a report that ranks employees with the highest 3 salary rates.
Format per the sample below.

Report Generated

```
RANK      AC:SALARY  LASTNAME
----      ---------- --------
   1      $20,771.00  SARDINE
   2      $19,600.00  MONKEY
   3      $18,377.00  ARDVARK
```

Report Request:

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In-Groups-Of

This command allows you to group the columns of your report into ranges of value. The syntax is:

      BY/ACROSS fieldname IN-GROUPS-OF ___

- Can only be used with a sort (BY or ACROSS).

- Grouped fields must be numeric (I, P or F).

- The first range always starts from 0.

- Only one IN-GROUPS-OF phrase may be used in a report.

In-Groups-Of Example

The report request below is a system wide count of employees by age.
The count is distributed in groups of 10. Note that the first range
identifies the number of employees who are age 10 through 19.

Report Request:

```
-* EMPLOYEE COUNTS BY AGE GROUP
EX SAC
TABLE FILE SAC
COUNT SAC:SEX
BY SAC:AGE IN-GROUPS-OF 10
END
```

Report Generated:

```
                AC:SEX
     AC:AGE      COUNT
     ------     ------
         10          1
         20         85
         30        211
         40        325
         50        389
         60        192
         70         29
         80          1
```

In-Groups-Of Practice

Write a report that will count how many employees received health benefits with a state share last month. Sort the data by state share amounts in $50 increments.

Report Generated:

```
                    PH:SSA
    PH:HBSTATE       COUNT
    ----------      ------
        $50.00         573
       $100.00         519
       $150.00         534
       $250.00          20
       $300.00         471
       $350.00         365
       $400.00         350
         TOTAL        2333
```

Report Request:

Columns

This command allows a fixed list of values to be specified for the columns. The syntax is:

      ACROSS fieldname COLUMNS value AND value

- The columns command can only be used with the sort: ACROSS.

- The values will display in the order specified and act as implied screening statements.

- Even if no data is retrieved for a value, the column will still appear on the report.

- Values with spaces or special characters must be enclosed in single quotes.

Columns Example

The report request below is a leave balance report. The columns command is used to sort the leave balances by type in the following order: sick leave, vacation and compensating time off.

Report Request:

```
-*LEAVE BALANCE REPORT
EX LX
TABLE FILE LX
SUM LX:LB
BY LX:WNAME
BY LX:SSA NOPRINT
ACROSS LX:LT COLUMNS SL AND VA AND CT
END
```

Report Generated:

```
                        LEAVE,TYPE
                          SL         VA         CT
LX:WNAME
--------------------------------------------------
ARMIDILLO, SP           328.00     368.00        .
BADGER DA                56.00      45.34        .
CHAMELEON, CK           588.00     294.00        .
DINGO PM                456.00     102.00      .75
```

Columns Practice

Write a report that counts your MPP positions as of 10/31 of the prior year. Sort the report by class code across ethnic group. Sort the values for ethnic group in the order shown below.

Report Generated:

```
        AN:ETHNICGRP
          BLK   HSP   ASN   AMI   WHT
CLS
----------------------------------------
3300          0     2     0     0     8
3306          2     1     2     0    24
3312          1     9     0     0    32
3318          0     2     0     0     4
```

Report Request:

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Rows

This command allows a fixed list of values to be specified for the rows. The syntax is:

BY fieldname ROWS value OVER value

- The rows command can only be used with the sort: BY.

- The values will display in the order specified and act as implied screening conditions.

- Even if no data is retrieved for a value, the row will still appear on the report.

- Values with spaces or special characters must be enclosed in single quotes.

Rows Example

The request below counts transactions by type for the prior calendar year. In order for the values to appear in the desired order, the rows command is used.

Report Request:

```
-*TRANSACTION COUNTS
EX TR
TABLE FILE TR
COUNT TR:TRANCODE
BY TR:TRANTYPE ROWS
   'APPOINTMENT' OVER
   'SEPARATIONS' OVER
   'MISCELLANEOUS CHANGE'
IF TR:EFFDATE FROM 01012001 TO 12312001
END
```


Report Generated:

```
                        TR:TRANCODE
                            COUNT
                        -----------
APPOINTMENT                    9189
SEPARATIONS                    4577
MISCELLANEOUS CHANGE          15152
```

Rows Practice

Write a report that counts the number of positions at your campus by Probationary Period Group. Display the counts in the order shown on the example below.

Report Generated:

```
            AC:POSITION
AC:PROBGROUP     COUNT
-----------  -----------
Perm Stat            430
Prob Stat            160
Temp Stat            555
No Prob Stat         110
```

Report Request:

What You Have Learned

In this module you have learned how to:

- Request data using implied prompting

- Multiple display commands

- Prefix operators