

AT START/END OF DATA Statements

This document discusses the use of the statements AT START OF DATA and AT END OF DATA.

The following topics are covered:

- AT START OF DATA Statement
 - AT END OF DATA Statement
 - Example of AT START OF DATA and AT END OF DATA Statements
 - Further Examples of AT START OF DATA and AT END OF DATA
-

AT START OF DATA Statement

The AT START OF DATA statement is used to specify any processing that is to be performed after the first of a set of records has been read in a database processing loop.

The AT START OF DATA statement must be placed within the processing loop.

If the AT START OF DATA processing produces any output, this will be output *before the first field value*. By default, this output is displayed left-justified on the page.

AT END OF DATA Statement

The AT END OF DATA statement is used to specify processing that is to be performed after all records for a database processing loop have been processed.

The AT END OF DATA statement must be placed within the processing loop.

If the AT END OF DATA processing produces any output, this will be output *after the last field value*. By default, this output is displayed left-justified on the page.

Example of AT START OF DATA and AT END OF DATA Statements

The following example program illustrates the use of the statements AT START OF DATA and AT END OF DATA. The system variable *TIME has been incorporated into the AT START OF DATA statement to display the time of day. The system function OLD has been incorporated into the AT END OF DATA statement to display the name of the last person selected.

```

** Example Program 'ATSTAX01'
DEFINE DATA LOCAL
1 MYVIEW VIEW OF EMPLOYEES
  2 CITY
  2 NAME
  2 JOB-TITLE
  2 INCOME (1:1)
  3 CURR-CODE
  3 SALARY
  3 BONUS (1:1)
END-DEFINE
WRITE TITLE 'XYZ EMPLOYEE ANNUAL SALARY AND BONUS REPORT' /
READ (3) MYVIEW BY CITY STARTING FROM 'E'
  DISPLAY GIVE SYSTEM FUNCTIONS

```

```

        NAME (AL=15) JOB-TITLE (AL=15) INCOME (1)
AT START OF DATA
  WRITE 'RUN TIME:' *TIME /
END-START
AT END OF DATA
  WRITE / 'LAST PERSON SELECTED:' OLD (NAME) /
END-ENDDATA
END-READ
AT END OF PAGE
  WRITE / 'AVERAGE SALARY:' AVER (SALARY(1))
END-ENDPAGE
END

```

The program produces the following output:

XYZ EMPLOYEE ANNUAL SALARY AND BONUS REPORT				
NAME	CURRENT POSITION	CURRENCY CODE	ANNUAL SALARY	BONUS

RUN TIME: 11:18:58.2				
DUYVERMAN	PROGRAMMER	USD	34000	0
PRATT	SALES PERSON	USD	38000	9000
MARKUSH	TRAINEE	USD	22000	0
LAST PERSON SELECTED: MARKUSH				
AVERAGE SALARY:		31333		

Further Examples of AT START OF DATA and AT END OF DATA

See the following example programs in library SYSEXPG:

- ATENDX01
- ATSTAX02
- WRITEX09