### #84        Searching for Records by Date

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Searching for records in a given month or week using user defined functions
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Many times it is necessary to search for a group of records in either a given month or a given week.  This is easy to do in the search editor using greater-than and less-than operators but it can be hard to write a generalized procedure to search for a month or week when given a specific date.  Below are three functions to help you do these kinds of searches.

**Syntax** FirstOfMonth(*stringexpr*)

Returns a date that is the first day of the month of "vDate".  "vDate" must be a date expression.

$0:=**Date**(**String**(**Month of**($1))+"/1/"+**String**(**Year of**($1)))

**Example:**

vStart:=*FirstOfMonth*(!3/23/88!)

vStart would be assigned !3/1/88!

**Syntax** LastOfMonth(*vDate*)

Returns a date that is the last day of the month of "vDate".  "vDate" must be a date expression.  This procedure also works for leap years.

$0:=**Date**(**String**(**Month of**($1)+1)+"/1/"+**String**(**Year of**($1)))-1

**Example:**

vEnd:=*LastOfMonth*(!3/23/88!)

vEnd would be assigned !3/31/88!

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**Syntax** FirstOfWeek(*vDate*)

Returns a date that is the first day of the week of "vDate".  "vDate" must be a date expression. *FirstOfWeek* considers Sunday to be the first day.

$0:=$1-**Day number**($1)+1

**Example:**

vFirst:=*FirstOfWeek*(!3/23/88!)

vFirst would be assigned !3/20/88! which is Sunday for the week of !3/23/88!

The importance of these functions can be seen in the following searches.

`  This search finds all records in the current month.
vStart:=*FirstOfMonth*(**Current date**)
vEnd:=*LastOfMonth*(**Current date**)

**SEARCH BY INDEX**([Filename]Fieldname±vStart;vEnd)


`  This search finds all records in the current week.
vFirst:=*FirstOfWeek*(**Current date**)
vLast:=vFirst+6

**SEARCH BY INDEX**([Filename]Fieldname±vFirst;vLast)

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