Module 7

Selection of Areas

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SELECT IF

In Modules 3a and 3b we discussed the selection of areas based on their area codes. In addition to selection based on the ZONEID of the required areas, SASPAC allows areas to be selected on the basis of criteria defined by the user and which apply to the value of selected variables. For example, selection may be restricted to all areas where the percentage of households living in local authority accommodation is greater than 50%.

The criteria for selection are constructed using the standard mathematical operators which are:

GT (or >)	Greater than
GE	Greater than or equal to
LT (or <)	Less than
LE	Less than or equal to
EQ (or =)	Equal to
NE	Not equal to

while complex conditions may be constructed using AND, OR, and NOT.

The criterion or criteria for selection is prefaced by the words SELECT IF, so that the format of the command is:

SELECT IF VAR1 GT 50

The functionality of radial searching is now available through the mapping environment and can be carried out using Google Maps (see Module 9) or the integrated Mapshore system.

Example

Output, to a print file, all OAs in the London Borough of Enfield, where the percentage of persons aged less than or equal to 15 is greater than or equal to 35%.

1.   In this example, we are asked to create a new variable, and to output it to a print file only where a given criterion is satisfied. We must therefore define the task as one that outputs a report consisting of variables, and we must create a new variable to calculate the required percentage. The usual procedure is thus followed, where a main task window is defined by the 'File / New Task / Output Report / Print Variables' menu option, or by use of the appropriate button on the Button Bar.

The appropriate file for OAs in the London Borough of Enfield is opened, and the new variable is calculated using the 'Manipulate Variables' Command Button, as described in Module 4.

2.   The 'Select Areas' Command Button is then used to access the 'Select Areas' window
        which appears as the default on the 'Explore Zones' Tab. Clicking on the 'Select If' Tab
   will open the window shown here.
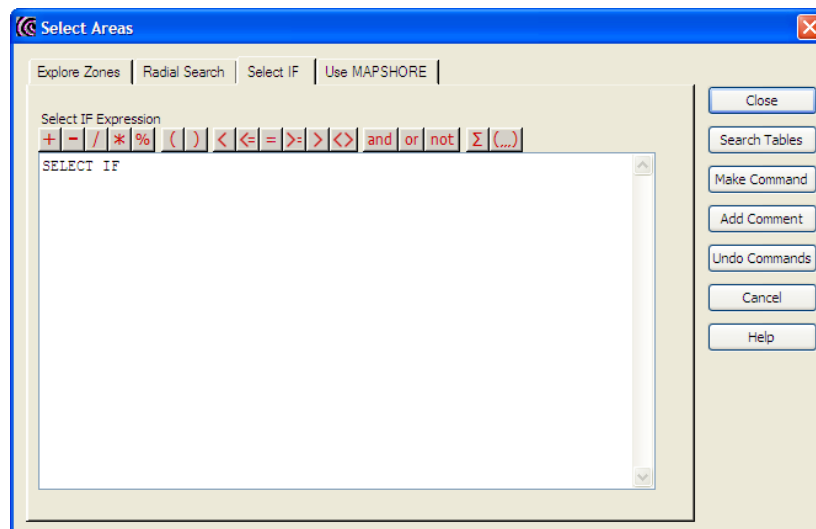
This window is very similar to the one which allows creation of new variables, and it may be used
in a similar manner. However, it must be noted that user created variables cannot be selected
from any list, and their identities must be typed into this text box. The arithmetic operators may
be selected from the buttons above the text box, and combination criteria can be constructed
using the logical operators.

3.   When the text 'perl15 >= 35' is entered into the text box, the 'Make Command'
        Command Button is used to ensure the command is constructed and written to the
        command file. The user then returns to the main task window (assuming that no further
        constraints on output are required), where the identity of the required output variables
        is entered in the appropriate text box, or selected via the 'Search Tables' Command
   Button. Once this is done the task may be run as before.

4.   The command file generated by this sequence is:

```
input system file name = "C:\SASPAC\Training /
System Files\2001 CENSUS AREA STATISTICS FOR OAS /
IN ENFIELD.SYS"
perl15=(CS0010006+ CS0010036+ CS0010066+/
CS0010101 ) / CS0010001*100.0
SELECT IF PERL15>=35
print variables perl15
output print file = /
C:\SASPAC\REPORT\TRAINING_MODULE_6.PRN
end
finish
```

5.   The output from this task is shown below. By using the 'Select IF' clause, of the 800+ OAs in Enfield, only nine have been output as meeting the selection criterion.
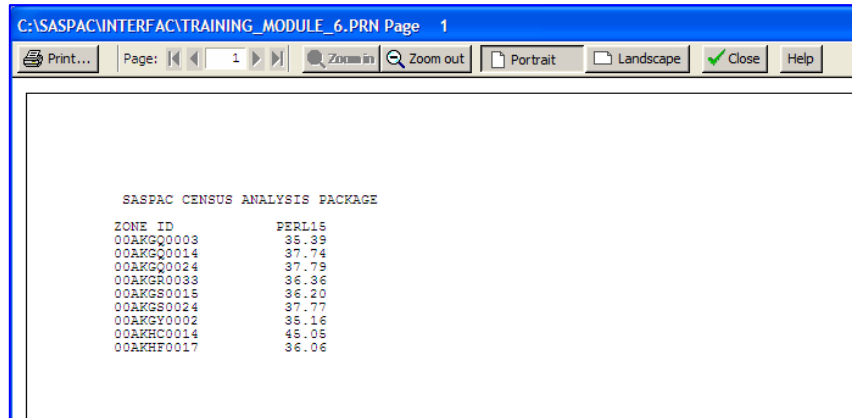
Summary of task sequence
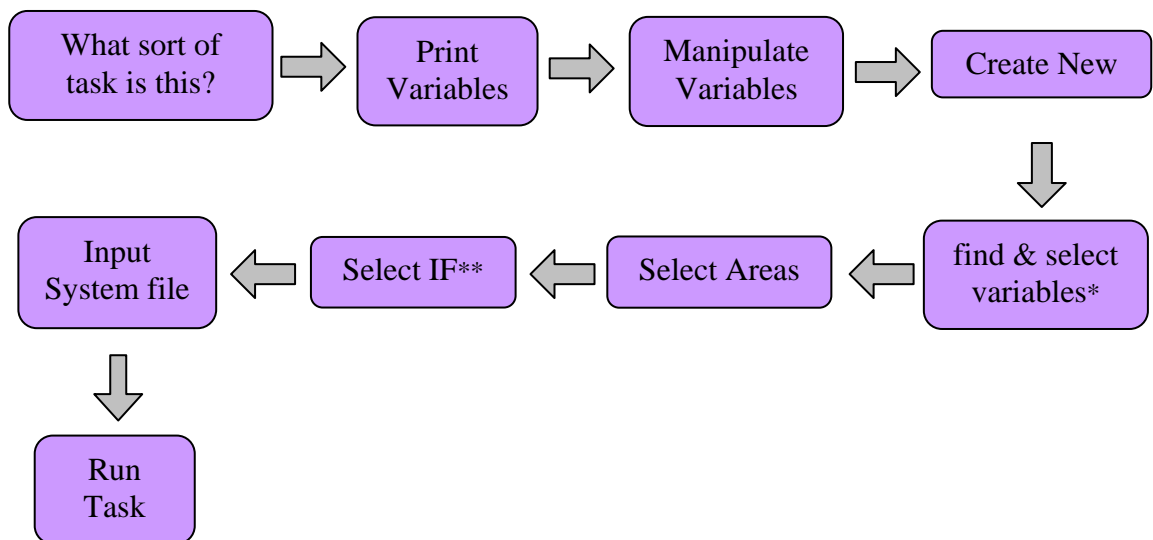
*remember to 'make command' after creating your new variable

**remember to 'make command' after defining the Select IF criteria