Association Rules: nagdmc_assoc_print

Purpose

nagdmc_assoc_print prints association rules following a successful call to **nagdmc_assoc**. Rules are sorted in ascending order of number of items.

Declaration

```
#include <nagdmc.h>
void nagdmc_assoc_print(long nr, long maxnir, long rule[], double stat[],
                        int *info);
```

Parameters

1:   **nr** – long   *Input*

On entry: the number of rules to print, as returned by **nagdmc_assoc**.

Constraint: **nr** > 0.

2:   **maxnir** – long   *Input*

On entry: the maximum number of items in a rule, as used in the call to **nagdmc_assoc**.

Constraint: **maxnir** > 1.

3:   **rule[(1+maxnir)∗maxnr]** – long   *Input*

On entry: the array containing generated rules, where **nr** $\leq$ **maxnr**, as returned by **nagdmc_assoc**.

4:   **stat[2∗maxnr]** – double   *Input*

On entry: the array containing the support and confidence for each generated rule, where **nr** $\leq$ **maxnr**, as returned by **nagdmc_assoc**.

5:   **info** – int *   *Output*

On exit: **info** gives information on the success of the function call:

    0: the function successfully completed its task.

    i; $i = 1, 2$: the specification of the ith formal parameter was incorrect.

  99: the function failed to allocate enough memory.

 100: an internal error occurred during the execution of the function.

Notation

nr   the number of rules, l.

rule contains the antecendent, A_i, and consequent, C_i, for the ith rule, for $i = 1, 2, \ldots, l$.

stat contains the support, x, and confidence, y, for the ith rule, for $i = 1, 2, \ldots, l$.

Description

nagdmc_assoc_print prints to the terminal screen used to execute a calling program the following information:

$$\text{Rule } i\colon\ A_i \to C_i\ (x, y), \quad i = 1, 2, \ldots, l,$$

where the antecedent and consequent of the ith rule are given by the members of sets A_i and C_i, respectively; and x and y are the support and confidence of the ith rule, respectively.

Rules are sorted in ascending order of the number of items in the antecedent.

References and Further Reading

None.

See Also

nagdmc_assoc	computes association rules from item data.
nagdmc_assoc_data	reads in items from a numeric ASCII file.
assoc_ex.c	the example calling program.