nag_ode_ivp_adams_free (d02qyc)

1. Purpose

nag_ode_ivp_adams_free is the function for freeing memory from the structure of type Nag_ODE_Adams. This memory will have been allocated to pointers within this structure during calls to the NAG C Library function nag_ode_ivp_adams_setup (d02qwc). This allocated memory is used by functions nag_ode_ivp_adams_roots (d02qfc) and nag_ode_ivp_adams_interp (d02qzc).

2. Specification

```
#include <nag.h>
#include <nagd02.h>

void nag_ode_ivp_adams_free(Nag_ODE_Adams *opt)
```

3. Description

The NAG C Library functions nag_ode_ivp_adams_setup (d02qwc), nag_ode_ivp_adams_roots (d02qfc) and nag_ode_ivp_adams_interp (d02qzc) use a structure of type Nag_ODE_Adams to retain and communicate information between calls of these functions. During this process memory is allocated to several pointers within the structure; nag_ode_ivp_adams_free may be used to free this memory when all calls to the functions nag_ode_ivp_adams_setup (d02qwc), nag_ode_ivp_adams_roots (d02qfc) and nag_ode_ivp_adams_interp (d02qzc) have been completed. A call to nag_ode_ivp_adams_free may also be made prior to re-entering nag_ode_ivp_adams_setup (d02qwc) with the parameter state = **Nag_NewStart**.

4. Parameters

opt

Input: the structure used in calls to the functions nag_ode_ivp_adams_setup (d02qwc), nag_ode_ivp_adams_roots (d02qfc) and nag_ode_ivp_adams_interp (d02qzc).

Output: all memory allocated to this structure will have been freed and the pointers set to **NULL**.

5. Error Indications and Warnings

None.

6. Further Comments

None.

7. See Also

nag_ode_ivp_adams_setup (d02qwc)
nag_ode_ivp_adams_roots (d02qfc)
nag_ode_ivp_adams_interp (d02qzc)

8. Example

For examples of the use of nag_ode_ivp_adams_free see the example programs for the functions nag_ode_ivp_adams_roots (d02qfc) and nag_ode_ivp_adams_interp (d02qzc).