
Subject: dealing with arguments

Posted by [fgg](#) on Wed, 02 Jun 2010 21:59:47 GMT

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Hello,

In this call:

proname, mode, s1, s2

s1 is necessary if mode=1; s2 is necessary if mode=2; and both s1 and s2 are necessary if mode=3.

If mode=1, s2 can be simply omitted, but if mode=2 then the user would still need to provide a s1, even though it will not be used, just because 3 numbers are needed in the calling sequence in order to define s2. Is there a way to avoid entering s1 when mode=2 while still making IDL understands that the second number in the call refers to s2? I hope this makes sense. Thank you!

Subject: Re: dealing with arguments

Posted by [fgg](#) on Wed, 02 Jun 2010 22:22:43 GMT

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On Jun 2, 3:17 pm, fgg <fabioquimaraesgoncal...@gmail.com> wrote:

> On Jun 2, 3:12 pm, pp <pp.pente...@gmail.com> wrote:

>

>> Use keywords instead of positional arguments:

>

>> pro name, mode, s1=s1, s2=s2

>

>> That way, when calling the routine you can use any order, or omit any

>> argument, and they still get associated to the right variables. Also

>> consider replacing s1 and s2 by more descriptive names, to make it

>> easier for users to know what the arguments mean. With keywords, you

>> can still use the short names inside your routine:

>

>> pro name, mode, some_argument_name_1=s1, some_other_argument=s2

>

> Thank you, pp. So if mode=2 and I want to make s2=100 then all I need

> is:

>

> proname, 2, s2=100 ?

Oh! And how do I set default values? For example, to make s2 always equal 10 if no other value is provided in the call.

Subject: Re: dealing with arguments

Posted by [penteado](#) on Wed, 02 Jun 2010 22:43:05 GMT

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> Oh! And how do I set default values? For example, to make s2 always
> equal 10 if no other value is provided in the call.

```
pro name, mode, s1=s1, s2=s2  
s2=n_elements(s2) ne 0 ? s2 : 10
```

```
...
```

```
end
```

Which you could then call as

```
name, 2, s2=100
```

It would make s2=10 if it is not provided (or is given an undefined variable).

By the way, it could also be called with

```
name, s2=100, 2
```

as it does not matter in which order you supply the keywords.

Subject: Re: dealing with arguments

Posted by [David Fanning](#) on Wed, 02 Jun 2010 22:50:12 GMT

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pp writes:

```
> pro name, mode, s1=s1, s2=s2  
> s2=n_elements(s2) ne 0 ? s2 : 10
```

```
> ...
```

```
> end
```

```
>
```

```
> Which you could then call as
```

```
>
```

```
> name, 2, s2=100
```

```
>
```

```
> It would make s2=10 if it is not provided (or is given an undefined  
> variable).
```

An alternative, which is a bit more descriptive in your programs, is SetDefaultValue:

```
pro name, mode, s1=s1, s2=s2
```

```
setdefaultvalue, s1, 5
setdefaultvalue, s2, 10
...
```

The default value is set (using pp's notation, basically) only if the variable is undefined when the program is run.

You can find the program here:

<http://www.dfanning.com/programs/setdefaultvalue.pro>

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Sepore ma de ni thue. ("Perhaps thos speakest truth.")

Subject: Re: dealing with arguments
Posted by [fgg](#) on Wed, 02 Jun 2010 22:52:56 GMT
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On Jun 2, 3:43 pm, pp <pp.pente...@gmail.com> wrote:
>> Oh! And how do I set default values? For example, to make s2 always
>> equal 10 if no other value is provided in the call.
>
> pro name, mode, s1=s1, s2=s2
> s2=n_elements(s2) ne 0 ? s2 : 10
> ...
> end
>
> Which you could then call as
>
> name, 2, s2=100
>
> It would make s2=10 if it is not provided (or is given an undefined
> variable).
>
> By the way, it could also be called with
>
> name, s2=100, 2

>
> as it does not matter in which order you supply the keywords.

Thanks a lot for your help.
