Subject: Re: pred & succ ?
Posted by Martin Schultz on Mon, 13 Nov 2000 08:00:00 GMT
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```
Andrew wrote:
 In article <3A0FA91A.7BEE1D07@dkrz.de>,
   Martin Schultz <martin.schultz@dkrz.de> wrote:
>>
>> FUNCTION pred, x
>>
     RETURN, x-1
>> END
>> FUNCTION succ, x
     RETURN, x+1
>> END
>>
  Thanks, Martin. I take that as a "no", though.
 I was thinking of a general, built-in (thus fast),
> function that returns the successor or predecessor
 of any ordinal variable.
> I knew I could write x-1, etc.. :-)
Well, the point is that x-1 already is quite fast because IDL is array
oriented. I'm not sure whether you could gain anything significant by
having this as a builtin function.
Cheers.
Martin
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                                               [[
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                                               [[
```

Subject: Re: pred & succ?

Posted by noymer on Mon, 13 Nov 2000 08:00:00 GMT

In article <3A0FA91A.7BEE1D07@dkrz.de>,
 Martin Schultz <martin.schultz@dkrz.de> wrote:

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> RETURN, x-1

> END

> FUNCTION succ, x

> RETURN, x+1

> END

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-- Andrew

Sent via Deja.com http://www.deja.com/ Before you buy.

Subject: Re: pred & succ ?
Posted by Martin Schultz on Mon, 13 Nov 2000 08:00:00 GMT
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Andrew wrote:

> Dear C.I.i-p,

> In Pascal (and probably in other high-level languages,

> but I don't know), there are built-in functions PRED(x)

> & SUCC(x), where x is any ordinal-type variable.

> e.g.: PRED(1)=0

> SUCC(2)=3

> PRED(TRUE)=FALSE

> etc., etc.

> Is there anything like this in IDL?
```

```
> -- Andrew
> Sent via Deja.com http://www.deja.com/
> Before you buy.
FUNCTION pred, x
    RETURN, x-1
END
FUNCTION succ, x
    RETURN, x+1
END
```

But is that really worth it? You won't be able to construct pred(false) for there is no distinct "false" in IDL. But this is actually a nice little "Denksportaufgabe" (although I am sure you can find a solution on some webpage, too): How do you construct a reliable complement of a variable that represents a boolean? Hints:

- should accept any (numerical) type (ok, maybe not complex ;-)
- variable type should be preserved
- 0 is false, everything else true (how about 1.e-30? probably best to define an "eps"); in output, "true" should be 1
- should not be constrained to scalars (IF(...) won't work)

Thanks to RSI for not providing us with a dedicated "logical" or "boolean" type. Otherwise this would be too trivial;-)

Cheers, Martin