
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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[[

```

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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>  
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> 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.. :-)

-- Andrew

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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

--

```
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```
