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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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```

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