

## Re: Grammatical Recursion

**Source:** <http://sci.tech-archive.net/Archive/sci.lang/2004-12/3404.html>

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On 2004-12-17, Des Small <des.small@bristol.ac.uk> wrote:

>  
> *Not all examples are trivial. The Ackermann function, for example:*  
>  
> *def Ack(M, N):*  
> *if (not M):*  
> *return( N + 1 )*  
> *if (not N):*  
> *return( Ack(M-1, 1) )*  
> *return( Ack(M-1, Ack(M, N-1)) )*  
>  
> *To rewrite this "iteratively" would surely involve hand-management of*  
> *a stack, which might as well be recursion.*

I does, but that only shows that Iteration is in fact just as powerful as Recursion.

Regards,

Florian