
Subject: Re: printing floats/integer
Posted by [R.G.S.](#) on Thu, 08 Mar 2001 17:27:35 GMT
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Sean Heukels <sean77=cuthere=@dds.nl> wrote in message
news:[9881p0\\$55o\\$1@newshost.accu.uu.nl](mailto:9881p0$55o$1@newshost.accu.uu.nl)...

> I wrote a small module for integers. The variable is formatted and
returned.

>

> "1" " returns as "1"

>

> Now this doesn't work with floats. for example if I want to print
"1.22221"

> I

> dont want to see it as "1.222221000000000000000000" or

> "1.222222" "

>

> Does anyone know how I can solve this ??

>

> Greets Sean

Please see the following code.

Note that there is a main level example code at the bottom of the function.

Using a = 123121.22222200000d

I get the following output:

Normal print command:

123121.22

Print command with GetFormat:

123121.222222

Cheers,
bob stockwell
stockwell@co-ra.com

```
function getformatstring,number
; this should be big enough to show everything
showallformatcommand = '(f50.25)'

nsize = size(number,/st)
case nsize.type of
;0: Undefined
```

```

;1: Byte
;2: Integer
;3: Longword integer
4: begin; Floating point
s = STRING(FORMAT=showallformatcommand, number)
s = strtrim(s,1) ; remove leading blanks
slen = strlen(s)
dpos=strpos(s,'.') ; find decimal position
if dpos eq -1 then begin
; this shouldn't happen
print,'Error: no decimal place found'
formatstring =
endif else begin
; chop off lagging 0s
zpos=0
doflag=1
while doflag do begin ; find how many lagging zeros there are
char = strmid(s,zpos,1,/reverse)
if char eq '0' then begin
zpos=zpos+1
endif else begin
doflag=0
endelse
endwhile
endelse
end
5: begin; Double-precision floating
s = STRING(FORMAT=showallformatcommand, number)
s = strtrim(s,1) ; remove leading blanks
slen = strlen(s)
print,'slen:',slen
print,s
dpos=strpos(s,'.') ; find decimal position
if dpos eq -1 then begin
; this shouldn't happen
print,'Error: no decimal place found'
formatstring =
endif else begin
; chop off lagging 0s
zpos=0
doflag=1
while doflag do begin ; find how many lagging zeros there are
char = strmid(s,zpos,1,/reverse)
if char eq '0' then begin
zpos=zpos+1
endif else begin
doflag=0
endelse

```

```

        endwhile
    endelse
    end
;6:; Complex floating
;7: String
;8: Structure
;9: Double-precision complex
;10: Pointer
;11: Object reference
;12: Unsigned Integer
;13: Unsigned Longword Integer
;14: 64-bit Integer
;15: Unsigned 64-bit Integer
else: begin
    print,'Error: Number not a supported type.'
    return," ; null string
endelse
endcase

d =slen-dpos-zpos-1
w = dpos+d+1 ; 1 for the decimal place
formatstring = strcompress("(f"+string(w)+'.'+string(d)+")",/rem)
return,formatstring

end

```

```

; ***** main level code here
a = 123121.22222200000d
;must become 1.22222 without leading or trailing spaces.
b= 1.00

print,'Normal print command:'
print,a
print,'Print command with GetFormat:'
print,a,format=getformatstring(a)

end

```
