
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...
> 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"
> |
> dont want to see it as "1.2222210000000000000000" or
> "1.222222" "
>
> Does anyone know how I can solve this ??
>
> Greetings 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  
showallformatcommmand = '(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=showallformatcommmand, number)
  s = strtrim(s,1) ; remove leading blanks
  slen = strlen(s)
  dpos=strpos(s, '.') ; find decimal posiiton
  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=showallformatcommmand, number)
  s = strtrim(s,1) ; remove leading blanks
  slen = strlen(s)
  print,'slen:',slen
  print,s
  dpos=strpos(s, '.') ; find decimal posiiton
  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

```

```

    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

```
