

AOZ Studio Beta - Bug #348

A user defined function cannot call another user-defined function. (Causes internal error or program freeze.)

04/18/2020 06:54 PM - Brian Flanagan

Status:	Feedback	Start date:	04/18/2020
Priority:	High	Due date:	
Assignee:	Francois Lionet	% Done:	0%
Category:		Estimated time:	2:00 hours
Target version:	1.0.0 (B3)		
Affected version:	1.0.0 (B3)		
Description			
Example:			
<pre>/* Leap Year: Brian Flanagan Parameter: y 4-digit year Returns: Leap Year (1=leap, 0=not) ' Yes, there's a reason for 0 or 1 */ Function "LeapYear",y ly=0 If y=4*Int(y/4) Then ly=1 If y=100*Int(y/100) Then ly=0 If y=400*Int(y/400) Then ly=1 End Function(ly) /* Parameters: y 4-digit year m month (1-12) d day of month (1-31) Returns: Day of year. */ Function "DayOfYear", y, m, d doy=Int(3055*(m+2)/100)-91 If m>2 Then doy=doy-2+LeapYear(y) doy=doy+d End Function(doy) Print DayOfYear(2020,1,31),DayOfYear(2020,4,18)</pre>			
Result in this instance is an Internal Error.			

History

#1 - 07/03/2020 11:05 PM - Brian Flanagan

- Affected version changed from 0.9.8.1 to 0.9.9.3

Retested in 0.9.9.3. Problem still exists. Causes program freeze.

#2 - 08/30/2020 01:29 PM - Francois Lionet

- Status changed from New to Resolved

- Assignee set to Francois Lionet

- Target version set to 0.9.9.4-r2

Fixed!

#3 - 10/04/2020 12:32 PM - Brian Flanagan

- Status changed from Resolved to Feedback

Tested in Beta RC3. Still broken.
Non-dimensioned array in line 21. LeapYear function is not recognized inside DayOfYear.

#4 - 10/08/2020 05:08 AM - Francois Lionet

- Status changed from Feedback to Resolved
- Target version changed from 0.9.9.4-r2 to Beta RC4

Fixed in RC4.

#5 - 10/09/2020 03:05 PM - Brian Flanagan

- Status changed from Resolved to Feedback
- Estimated time set to 2:00 h

After the 9 Oct updates, it no longer gets an internal error, however there is still a problem.
It may or may not be a related issue.

Using the same example code above, printing out the function results individually works, however, making multiple calls to the function in a single print statement gives unpredictable results. Example:

```
/*
Leap Year:  Brian Flanagan
Parameter:  y   4-digit year
Returns:    Leap Year (1=leap, 0=not) ' Yes, there's a reason for 0 or 1
*/
Function "LeapYear",y
  ly=0
  If y=4*Int(y/4) Then ly=1
  If y=100*Int(y/100) Then ly=0
  If y=400*Int(y/400) Then ly=1
End Function(ly)

/*
Parameters: y   4-digit year
            m   month (1-12)
            d   day of month (1-31)
Returns:    Day of year.
*/
Function "DayOfYear", y, m, d
  doy=Int(3055*(m+2)/100)-91
  If m>2 Then doy=doy-2+LeapYear(y)
  doy=doy+d
End Function(doy)

// NOTE: All of the function calls work *individually*
Print DayOfYear(2020,1,31) ' Works (31)
Print DayOfYear(2020,2,29) ' Works (60)
Print DayOfYear(2020,3,3) ' Works (63)
Print DayOfYear(2020,4,18) ' Works (109)
Print DayOfYear(2020,12,31) ' Works (366)
// ...but not when multiple items are printed on the same line.
Print DayOfYear(2020,1,31),DayOfYear(2020,1,31) ' Both work.
Print DayOfYear(2020,1,31),DayOfYear(2020,4,18) ' Works 2nd x only. (wrong result on 1st)
Print DayOfYear(2020,1,31),DayOfYear(2020,12,31) ' Works 2nd x only. (wrong result on 1st)
Print DayOfYear(2020,1,31),DayOfYear(2020,12,31),DayOfYear(4,18) ' Works 2nd x only (wrong result on 1st, 3rd
x = NaN)
Print DayOfYear(2020,1,31),DayOfYear(2020,2,29),DayOfYear(2020,4,18),DayOfYear(2020,12,31) ' Wrong result on 1
st
Print DayOfYear(2020,1,31),DayOfYear(2020,2,29),DayOfYear(2020,4,18),DayOfYear(2020,12,31),DayOfYear(2020,3,3)
' Wrong result on 1st
```

#6 - 02/14/2021 04:29 AM - Brian Flanagan

- Affected version changed from 0.9.9.3 to 1.0.0 (B3)

This was partially fixed before, however, it is now completely broken again.

Newest test was in 1.0.0 B3 (2/12/2021).

Example:

```
Function "Number1$"
End Function("one")
```

```
Function "Number2$"
End Function(Number1$+" two")
```

```
Print "Number1: ";Number1$ // This works (by itself - you'll have to comment the last line)
Print "Number2: ";Number2$ // Should print "one two", but fails.
```

#7 - 02/14/2021 04:29 AM - Brian Flanagan

- Target version changed from Beta RC4 to 1.0.0 (B3)

#8 - 02/14/2021 04:30 AM - Brian Flanagan

- Priority changed from Normal to High