
Subject: RETURN

Posted by [fd_luni](#) on Wed, 04 Dec 2013 22:13:15 GMT

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Hi

The following is a simple example of what I want to do:

```
a=[1,2,3]
```

```
b=[1,3,4]
```

```
return, a+b
```

But I got an error: Return statement in procedures can't have values.

Many Thanks

M

Subject: Re: RETURN

Posted by [Burch](#) on Wed, 04 Dec 2013 22:19:38 GMT

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On Wednesday, December 4, 2013 4:13:15 PM UTC-6, fd_...@mail.com wrote:

> Hi

>

>

>

> The following is a simple example of what I want to do:

>

> a=[1,2,3]

>

> b=[1,3,4]

>

>

>

> return, a+b

>

>

>

> But I got an error: Return statement in procedures can't have values.

>

>

>

> Many Thanks

>

> M

You should write a function instead of a procedure.

http://www.exelisvis.com/docs/Defining_a_Function.html

-Jeff

Subject: Re: RETURN

Posted by [fd_luni](#) on Wed, 04 Dec 2013 23:33:03 GMT

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If I want to return more than one?

I.e. a[1,2]
 b=[2,3]

 return, a+b, 2*a

It says that the return statement in functions must have 1 value.

Subject: Re: RETURN

Posted by [Matthew Argall](#) on Thu, 05 Dec 2013 02:21:08 GMT

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On Wednesday, December 4, 2013 6:33:03 PM UTC-5, fd_...@mail.com wrote:

> If I want to return more than one?

>

>

>

> I.e. a[1,2]

>

> b=[2,3]

>

>

>

> return, a+b, 2*a

>

>

>

> It says that the return statement in functions must have 1 value.

Functions in IDL are not like functions in, e.g., MatLab. You can only return one value. To do this, you must use a procedure and put the output variables in the calling statement.

```
pro foo, a, b, a_plus_b, twoa
  a_plus_b = a + b
  twoa = 2*a
```

end

;-----

a = [1,2]

b = [2,3]

foo, a, b, c, d

print, b, c

Subject: Re: RETURN

Posted by [wlandsman](#) on Thu, 05 Dec 2013 02:33:37 GMT

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On Wednesday, December 4, 2013 6:33:03 PM UTC-5, fd_...@mail.com wrote:

>
> return, a+b, 2*a
> It says that the return statement in functions must have 1 value.

Another possibility is to return a 2 element vector

return,[a+b, 2*a]

Subject: Re: RETURN

Posted by [Craig Markwardt](#) on Thu, 05 Dec 2013 09:55:24 GMT

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On Wednesday, December 4, 2013 9:33:37 PM UTC-5, wlandsman wrote:

> Another possibility is to return a 2 element vector
>
> return,[a+b, 2*a]

True, but A and B are listed as vectors already, so that may lead to some unintended consequences.

To Maria, IDL only lets you return one variable with the RETURN statement. To pass more data out of your function, you either need to concatenate arrays like Wayne showed, or use named variables like Matthew Argall showed. Neither is very intuitive for a non-programmer.

Subject: Re: RETURN

Posted by [Phillip Bitzer](#) on Thu, 05 Dec 2013 11:34:32 GMT

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Or, you can return a structure:

```
str = {sum:a+b, multiply:2*a}
```

```
RETURN, str
```

```
END
```
