
Subject: Re: Imaginary is narrow minded
Posted by [davidf](#) on Tue, 02 Sep 1997 07:00:00 GMT
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Now I'm really brainstorming. Here is another program for Brian Jackel:

```
FUNCTION IF_IMAGINARY, variable
types = ['UNDEFINED', 'BYTE', 'INTEGER', 'LONG', 'FLOAT', $
        'DOUBLE', 'COMPLEX', 'STRING', 'STRUCTURE', $
        'DCOMPLEX', 'POINTER', 'OBJECT']
s = Size(variable)
thisType = types(s(s(0) + 1))
IF thisType EQ 'COMPLEX' THEN RETURN, Imaginary(variable) $
ELSE RETURN, 0.0
END
```

Then, you can do this:

```
imaginaryPart = IF_IMAGINARY(variable)
```

Cheers,

David

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Subject: Re: Imaginary is narrow minded
Posted by [davidf](#) on Tue, 02 Sep 1997 07:00:00 GMT
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Brian Jackel writes:

```
> <Rant>
> I'm stuck with IDL 4.0, and was wondering if the snazzy new version
> still gives this stupid error
>
> % IMAGINARY: Operand must be of complex type:
>
> Alternatively, I'd love to know _why_ it can't just return a zero value.
> Sometimes the argument is going to be real, and it irritates me to add
> the extra call to make sure the argument is complex. IDL functions are
```

> usually pretty clever about dealing with variable input types, but not here.
> </Rant>

Oh, dear, it's one of those days, apparently. Here, Brian, something to cheer you up.

```
FUNCTION Type, variable
types = ['UNDEFINED', 'BYTE', 'INTEGER', 'LONG', 'FLOAT', $
        'DOUBLE', 'COMPLEX', 'STRING', 'STRUCTURE', $
        'DCOMPLEX', 'POINTER', 'OBJECT']
s = Size(variable)
RETURN, types(s(s(0) + 1))
END
```

```
IF Type(thatThing) EQ 'COMPLEX' THEN thisThing=Imaginary(thatThing)$
ELSE thisThing = 0
```

Cheers,

David

--

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Subject: Re: Imaginary is narrow minded
Posted by [Christian Soeller](#) on Wed, 03 Sep 1997 07:00:00 GMT
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davidf@dfanning.com (David Fanning) writes:

```
>
> IF Type(thatThing) EQ 'COMPLEX' THEN thisThing=Imaginary(thatThing)$
> ELSE thisThing = 0
>
```

Wouldn't you want to make it return an array of zeroes when called with an array?

Christian Soeller

Subject: Re: Imaginary is narrow minded
Posted by [meron](#) on Wed, 03 Sep 1997 07:00:00 GMT

In article <jackel.140.20AC6E36@danlon.physics.uwo.ca>, jackel@danlon.physics.uwo.ca (Brian Jackel) writes:

> Greetings

>

> <Rant>

> I'm stuck with IDL 4.0, and was wondering if the snazzy new version

> still gives this stupid error

>

> % IMAGINARY: Operand must be of complex type:

>

> Alternatively, I'd love to know why it can't just return a zero value.

I wrote my own function, M_IMAGINARY, which takes care of just this problem, and I use it exclusively instead of the IDL IMAGINARY.

Mati Meron | "When you argue with a fool,
meron@cars.uchicago.edu | chances are he is doing just the same"
