
Subject: Please explain...

Posted by [mallozzi](#) on Sun, 26 Nov 1995 08:00:00 GMT

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Can someone explain this to me?

```
IDL> .r
- x = 0 & y = 0
- case 1 of
- x and y: print, '1'
- NOT x and y: print, '2'
- x and NOT y: print, '3'
- NOT x and NOT y: print, '4'
- endcase
- end
% Compiled module: $MAIN$.
% Case statement found no matches.
% Execution halted at $MAIN$ </dev/tty( 1)> .
IDL> if NOT x and NOT y then print, '4'
4
IDL>
```

The other three cases work as I expected in the case statement. Thanks.

-Bob

Subject: Re: Please explain...

Posted by [Ding Wu - see John Vo](#) on Mon, 27 Nov 1995 08:00:00 GMT

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Please note:

The NOT operator is the Boolean inverse and is a unary operator because it has only one operand. In other words, "NOT true" is equal to "false" and "NOT false" is equal to "true." NOT complements each bit for integer operands. For floating-point operands, the result is 1.0 if the operand is zero; otherwise, the result is zero.

So

1: if change x=0 & y=0 to x=.0 & y=.0 then all will work.

For x=0 & y=0 , (not x and not y) is (not 0000 and not 0000) ie. -1,

For x=.0 & y=.0, (not x and not y) is 1.0

2: in the case statement, each of the conditions must be matched to 1.

so, case statement (not x and not y = -1) found no matches.

3: but in if statement, the conditions only need to be not zero.

so, if statement (not x and not y = -1) is true.

Ding Wu, need a job, desperately!

mallozzi@ssl.msfc.nasa.gov wrote: : Can someone explain this to me?

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: - x and y: print, '1'
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: % Compiled module: $MAIN$.
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: IDL> if NOT x and NOT y then print, '4'
: 4
: IDL>
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Subject: Re: Please explain...

Posted by [jlaw](#) on Mon, 27 Nov 1995 08:00:00 GMT

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In article 2gt@hammer.msfc.nasa.gov, mallozzi@ssl.msfc.nasa.gov writes:

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>

> IDL> .r

> - x = 0 & y = 0

> - case 1 of

> - x and y: print, '1'

> - NOT x and y: print, '2'

> - x and NOT y: print, '3'

> - NOT x and NOT y: print, '4'

> - endcase

```
> - end
> % Compiled module: $MAIN$.
> % Case statement found no matches.
> % Execution halted at $MAIN$ </dev/tty( 1)> .
```

Well, I am getting

```
: x = 0
: print, NOT x
-1
: y = 0
: print, NOT x AND NOT y
-1
```

So your CASE does not evaluate to 1 here. < time out to look at online help >
The 'problem' is the implementation of Boolean types in IDL : It is done
bitwise, and even integers are true.. In fact there are no special
"TRUE" and "FALSE" values. Perhaps its best here to use an ELSE: label.
Are you sure all your booleans will always be 0 or 1?

f.
