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Subject: Re: bit operations

Posted by [thompson](#) on Thu, 02 May 2002 18:01:52 GMT

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"Dominik Paul" <dpaul@ukl.uni-freiburg.de> writes:

> Hi there,

> are there any other bit operations in IDL except shift and ishift?

> I would like to know, if a bit is set and I would like to set a bit by

> myself in a variable.

Dom:

The logical operators AND, OR, XOR and NOT are bitwise operators. These can be used to both set and interrogate bits in integer values.

For example, suppose that J=5b, which is '0101' in bit notation. One can turn on the second bit from the right with the command

```
IDL> J = J OR 2b
```

This converts J to '0111', i.e. 7b.

On the other hand, if you want to know if the 2nd bit is turned on or not, you can find out with

```
IDL> IF (J AND 2B) NE 0 THEN PRINT, 'Second bit is turned on'
```

Bill Thompson

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