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Subject: Re: what is Floating illegal operand question?  
Posted by [Michael Wallace](#) on Mon, 18 Apr 2005 21:51:18 GMT  
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(0 / 0) is just as undefined as (0.0 / 0.0) is. However, there is no way to express NaN or Infinity when working with integers. The IEEE floating point specification allows for NaN and Infinity, but the integer spec does not. Without a NaN option, IDL (and other languages as well), default to evaluating (0 / 0) as 0 even though this is technically incorrect.

-Mike

Haje Korth wrote:

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> Well, if I understand this right, 0/0 is defined and the result is 0, so
> that the division by zero message is only informational. On the other hand
> 0./0. is not defined for floating point numbers and results in an error (see
> http://mathworld.wolfram.com/DivisionbyZero.html). Correct me if I am wrong.
>
> Haje
>
>
>> You're getting it from a floating point divide by zero. When using
>> integers, IDL actually tells you that you tried to divide by zero. For
>> some reason, they have a different message for floating point.
>>
>> IDL> x = 0 / 0
>> % Program caused arithmetic error: Integer divide by 0
>> IDL> x = 0.0 / 0.0
>> % Program caused arithmetic error: Floating illegal operand
>>
>> -Mike
>
>
>
```

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