Subject: Re: Floats
Posted by Andrew Cool on Thu, 09 Mar 2006 23:16:03 GMT
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Paul Van Delst wrote:
> Mark Hadfield wrote:
>> Paul Van Delst wrote:
>>
>>> Sheldon wrote:
>>>
>>>>
>>>> Here is a silly question: Can I define a float array and control how
>>>> many decimal places are kept? For example, I want all values to only
>>>> have an accuracy to the nearest 100th (20.15 and not 20.154983445).
>>>> Kind of like in printing, you know, the f5.2 print definition, but only
>>>> for variables and arrrays.
>>>
>>>
>>> May I ask why? Usually this sort of thing is required for printing,
>>> but not for regular old storage of numbers.
>>
>>
>> Currency?
>
> Ah, fair enough. But a hasty google reveals that currency calculations are not done at the
> cent level - a higher precision is required; for currency conversions (6sigfigs), or in
> calculating how much you have to pay when you buy petrol or gas etc, (1000th's seem to be
> the common unit.).
>
> Another example I looked at converted 1000 Finnish Markka's to Euros 6 times (conversion

times.
>
> So, it seems to me the only reason you'd need precision to 100th's for currency is for
> printing your invoices. :o)
>
> cheers,
>
> paulv
>

When I were young'un just out of Uni, I worked in the local HQ of
British Petroleum (BP),
and the one number we all learned by heart was the conversion factor
from imperial
gallons to metric litres : 4.54609 litres/imp_gallon. A road going
petrol tanker in those

days held 37,000 litres, and a big service station might get 2 or 3 of those delivered
per day. Even the temperature of the petrol (gas for the Yanks) was taken into account
in determining the volume delivered. Of course 37,000L ain't all that much compared to
the mega-millions held in the big storage tanks, where 4.54609 really made a difference.

I had the opportunity once to walk on top of one of the big storage tanks. Round and round up the spiral stairs running around the outside oft he tank, then onto the roof.
The roof was made of thin metal, and designed to blow off in event of fire. It flexed
like a trampoline as you walked on it, and it was the most uncanny, and scariest
experience all at the same time. Would this thing support me, or dump me into
the hydrocarbon bath below...? Once was enough!

Slightly OT, but Hey! It's Friday...

Andrew
