Subject: Re: Time for little quiz!
Posted by mirek on Thu, 06 Apr 2006 14:25:43 GMT

victorb wrote on Thu, 06 April 2006 10:17Graeme,

If I understand your previous topic well, you are stating that there might be an inconsistency between GCC and VC because they do not handle integer the same way and you are afraid this might cause errors with "(-q >> 31) & 1".

However if you look at the following URL:
http://msdn2.microsoft.com/en-US/library/7x62187h(VS.80).aspx
You will see that VC handle right shifts the same way as GCC by etending the sign bit (for negative number as "-q").

VC:
"Right shifts preserve the sign bit. When a signed integer shifts right, the most-significant bit remains set. When an unsigned integer shifts right, the most-significant bit is cleared."

GCC:
"Signed >> acts on negative numbers by sign extension."

Victor

Let me just note that for "(x >> 31) & 1" expression, as long as int is 32 bits or more, it does not matter how sign extension works

Mirek