Subject: Re: Time for little quiz!
Posted by mirek on Wed, 05 Apr 2006 10:04:57 GMT
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gprentice wrote on Wed, 05 April 2006 05:20luzr wrote on Wed, 05 April 2006 20:54PS, note this nice gem as well:

x.colorcount += (-q >> 31) & 1;

Mirek

Do you feel like explaining?

I'm sure you know that right shift of a signed negative value has an implementation defined result and that int isn't always 32 bits and ... why would you write obscure code like this ???

Graeme

To avoid conditional jump in inner loop:

I need

if(q) colorcount++;

Now I know that q is positive number or zero. By negating positive number, you obviously get 1 in the highest bit. By negating zero, you get zero...

BTW, U++ guarantees int to be at least 32 bits (in other words, it requires it as well Also, right shift is implementation defined, however it guarantees that it is a shift... (I mean, what is implementation defined is content of high bits, but obviously, existing bits have to be shifted...)

On the similar theme:

inline byte Saturate255(int x) { return byte(~(x >> 24) & (x | (-(x >> 8) >> 24)) & 0xff); }

jump-less equivalent of min(max(x, 0), 255) (important in image processing).

Mirek