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Subject: Re: Some new functions

Posted by [Novo](#) on Thu, 25 Nov 2010 15:43:06 GMT

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dolik.rce wrote on Sat, 20 November 2010 14:55Fun fact: I tried to come up with optimal solution for Even() and all of the following appear to have same speed as the one from Koldo (with gcc

```
optimal+speed flag):inline bool even1(int val) {return !(val&1);}
```

```
inline bool even2(int val) {return ~val&1;}
```

```
inline bool even3(int val) {return !(val%2);}
```

Without the speed flag even2() seems to be slightly faster.

Also val%2 and val&1 for Odd() yields the same speed in both cases

However, the proposed RoundEven() function is suboptimal thanks to the branching. Even though

it won't probably be used often, I would suggest faster version:inline int roundeven(int val) {return

```
((1+val)>>1)<<1;}
```

```
//for completeness also rounding to odd numbers:
```

```
inline int roundodd(int val) {return ((val>>1)<<1)+1;}
```

Best regards,

Honza

Hi Honza,

I posted a link to a collection of optimized functions here

<http://www.ultimatepp.org/forum/index.php?t=msg&th=5683&start=0&>

It looks like it might be helpful for your experiments.

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