

Re: why does adding 2 bytes together result in an int?

Source:

<http://www.tech-archive.net/Archive/DotNet/microsoft.public.dotnet.languages.csharp/2006-03/msg00469.html>

- *From:* "Kevin Spencer" <kevin@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Thu, 2 Mar 2006 14:55:32 -0500
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This is because the developers of the platform have decided that the return type of the + operator for the byte type should be an integer. That makes sense, because (1) the return type must be the same for all operations, and (2) there is no guarantee that adding 2 or more byte values together will not overflow the size of a byte, which is 256.

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HTH,

Kevin Spencer
Microsoft MVP
..Net Developer
A brute awe as you,
a Metallic hag entity, eat us.

"moondaddy" <moondaddy@xxxxxxxxxxxx> wrote in message
news:Ofz5SwhPGHA.2300@xxxxxxxxxxxxxxxxxxxxxxxxxxxx

my understanding is that the max value of a byte is 255. Therefore, why does the following code get a compile error?

```
byte val1 = 10;  
byte val2 = 23;  
byte ttl;  
ttl = val1 + val2; //this line wont compile
```

compile error: Cannot implicitly convert type 'int' to 'byte'.

val1 + val2 = 33 which is still in the range of a byte. therefore, why do I need to convert ttl into an int?

Thanks.

Re: why does adding 2 bytes together result in an int?

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moondaddy@xxxxxxxxxxxxxx