

Re: Newbie question on unions

Source: http://coding.derkeiler.com/Archive/C_CPP/comp.lang.cpp/2004-10/1208.html

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patleonard wrote:

> *The following code produces this output:*

>

> *Characters: XY*

> *Integer: 22872*

>

> *Where does the integer 22872 come from?*

>

> `#include <iostream.h>`

>

> `int main()`

> `{`

> `union test_union{`

> `short int i;`

> `char ch[2];`

> `} unvar;`

>

> `unvar.ch[0] = 'X';`

> `unvar.ch[1] = 'Y';`

>

> `cout << "Characters: " << unvar.ch[0] << unvar.ch[1] << '\n';`

> `cout << "Integer: " << unvar.i << '\n';`

Reading a member of a union after writing to another one is not allowed in C++. Most platforms I know will just give you a reinterpretation of the two char values as one short value, but the right tool to do this is a `reinterpret_cast`.

>

> `return 0;`

> `}`

>

> *It may be a stupid question, but I don't know the answer. Any response*

> *will be helpful, thank you.*