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| --- | --- |
| **EX05-05.cpp:** *Union* | |
| **Line#** | **Code** |
| 1  2  3  4  5  6  7  8  9  10  11  12  13  14  15  16  17  18  19  20  21  22 | #include <iostream>  using namespace std;  union S {  int n; // occupies 4 bytes  short s[2]; // occupies 4 bytes  char c; // occupies 1 byte  }; // the whole union occupies 4 bytes  int main() {  S s = { 0x12345678 }; // initializes the first member,  // s.n is now the active member  // at this point, reading from s.s or s.c is undefined behavior  cout << "sizeof(S) is " << sizeof(S) << endl;  cout << hex << "s.n = " << s.n << endl;  s.s[0] = 0x0011; // s.s is now the active member  // at this point, reading from n or c is UB but most  // compilers define it  cout << "s.c is now " << +s.c << endl // 11 or 00, depending on platform  << "s.n is now " << s.n << endl; // 12340011 or 00115678  return 0;  } |