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CSC 408

28 August 2024

Classwork 1

1. Short s = -15
   1. Short is 16 b so 15 as binary will be represented as: 0000 0000 0000 1111  
      Then to find -15, we flip the binary numbers of 15 binary representation to opposite values and add 1:   
      1111 1111 1111 0000 + 1 = **1111 1111 1111 0001**
2. Explain the result  
   “ int m = 65667;  
   char c1 = m;  
   cout << int(c1) << endl;”
   1. m is an integer value that initially is set to 65667. However, in the next step we assign char (that takes 8 bits) equal to an integer, which takes 32 bits of memory. To work this out we only look at the last 8 bits of the integer and show the value of char as the final step of the given solution.
   2. 65667 in binary: 0000 0000 0000 0001 0000 0000 0110 0011
   3. The value of last 8 bits ‘0110 0011’is 99 in decimal.
   4. The result needs to give the int value of char which is **99.**