**Code:**

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| // Problem 5. Numeral System Conversions  // Convert 1234d to binary and hexadecimal numeral systems.  // Convert 1100101b to decimal and hexadecimal numeral systems.  // Convert ABChex to decimal and binary numeral systems.  using System;  using System.Collections.Generic;  using System.Linq;  class NumeralSystemConversions  {  static void Main()  {  // 1. Convert 1234d to binary and hexadecimal numeral systems.  Console.WriteLine("1. Convert 1234d to binary \nand hexadecimal numeral systems:\n");  // to binary:  Console.WriteLine("The binary representation of 1234 is \n{0}\n", Convert.ToString(1234, 2));  // to hexadecimal:  Console.WriteLine("The hexadecimal representation of 1234 is \n{0:X}\n", 1234);  // 2. Convert 1100101b to decimal and hexadecimal numeral systems.  Console.WriteLine("2. Convert 1100101b to decimal \nand hexadecimal numeral systems:\n");  // to decimal:  Console.WriteLine("The decimal representation of 1100101b is \n{0}\n", Convert.ToInt32("1100101", 2));  // to hexadecimal:  string hexNumber = Convert.ToInt32("1100101", 2).ToString("X");  Console.WriteLine("The hexadecimal representation of 1100101b is \n{0:X}\n", hexNumber);  // 3. Convert ABChex to decimal and binary numeral systems.  Console.WriteLine("3. Convert ABChex to decimal \nand binary numeral systems:\n");  // to decimal:  Console.WriteLine("The decimal representation of ABChex is \n{0}\n", Convert.ToInt32("ABC", 16));  // to binary:  string binary = Convert.ToString(Convert.ToInt32("ABC", 16), 2);  Console.WriteLine("The hexadecimal representation of ABChex is \n{0:X}\n", binary);  }  } |

**Output:**

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| 1. Convert 1234d to binary  and hexadecimal numeral systems:  The binary representation of 1234 is  10011010010  The hexadecimal representation of 1234 is  4D2  2. Convert 1100101b to decimal  and hexadecimal numeral systems:  The decimal representation of 1100101b is  101  The hexadecimal representation of 1100101b is  65  3. Convert ABChex to decimal  and binary numeral systems:  The decimal representation of ABChex is  2748  The hexadecimal representation of ABChex is  101010111100  Press any key to continue . . . |