***Assignment #1***

For Q1- Q4 you need to show your work

Q1: Find the Hexadecimal Representation for each of the following Binary numbers

1. **10101101**

8421 8421 = **AD**

**A D**

1. **00100111**

8421 8421

**= 27**

**27**

Q2: Find the Decimal Representation for each of the following Hexadecimal numbers

1. **8EF**

8.16^2 + 14.16 + 15.1 = 2287

1. **5CE**

5.16^2 + 12.16 + 14.1 = 1486

Q3: Find the Binary Representation for each of the following Decimal numbers

1. **53**

32 16 8 4 2 1

**= 110101**

1. **885**

512 256 128 64 32 16 8 4 2 1

**= 1101110101**

Q4: Find the answer for the following

Hexadecimal

1. 35 + AB

35

+AB

**=E0**

1. AA – 22

AA

-22

**=88**

**Binary**

1. 11110 + 00111

**11110**

**+00111**

**=100101**

1. 11001 - 11011

**11001**

**-11011**

**= 1110**

Q5: Write a C++ program to convert a binary number into hexadecimal.

Note: for this question you need to submit the source code and screen shot for the output