

CIS231

Lab1

Answer the following questions. Show your work, no work no credit even if the answer is correct

Type your answer and make the final answer distinguished

- 1- In an 8-bit binary, which is the most significant bit (MSB), what decimal value does it have?
- 2- What is the decimal representation of each of the following unsigned integers?
 - a. 00110101
 - b. 10010110
 - c. 11001100
- 3- What is the sum of each pair of binary integers?
 - a. 10101111 + 11011011
 - b. 10010111 + 11111111
 - c. 01110101 + 10101100
- 4- What is the minimum number of binary bits needed to represent each of the following unsigned decimal integers?
 - a. 4095
 - b. 65534
 - c. 42319
- 5- How many different numbers can be represented with 23 bits?
- 6- Write a Java/C++ program that contains the calculation shown below.
int Y;
int X = (Y + 4) * 3;