CMPU-224 Lab2 Quiz Practice Solutions

Spring 2025

1. Write the URL for the class website: https://**cs224.cs.vassar.edu**

2. Convert the decimal (base-10) integer `27` to binary: **11011**

3. Convert the unsigned binary (base-2) integer `1001011` to decimal: **75**

4. Convert the binary integer `101011001001` to hexadecimal (base-16): **0xAC9**

5. Convert the hexadecimal integer `0xD2B6` to binary: **1101 0010 1011 0110**

6. Convert the decimal integer `-42` to a 8-bit sign and magnitude number.

   Give your answer in **hexadecimal**: **0xAA**

7. Convert the decimal integer `-42` to a 8-bit one's complement number.

   Give your answer in **hexadecimal**: **0xD5**

8. Convert the decimal integer `-42` to a 8-bit two's complement number.

   Give your answer in **hexadecimal**: **0xD6**

9. Convert the unsigned base-4 number 1032_4 to a decimal number: **78**

10. What is the smallest (most negative) 8-bit two's complement number?

    Give your answer in **hexadecimal**: **0x80**