To receive credit for this assignment, you must show your work on all problems. You are strongly encouraged to check your answers using GDB and your C programs from lab 1.

1. Convert the 8-bit unsigned binary value $10011110$ to decimal.

2. Convert the 8-bit two's complement binary value $10011110$ to decimal.

3. Convert the decimal value $112$ to 8-bit two’s complement binary.

4. Convert the decimal value $-89$ to 8-bit two’s complement binary.
5. Convert the hex value \( \text{0x4AF9} \) to 16-bit unsigned binary.

6. Convert the 16-bit unsigned binary value \( 0010000011011110 \) to hex.

7. Convert the hex value \( \text{0x250C} \) to 16-bit unsigned binary.

8. Convert the decimal value \( 10000 \) to hexadecimal.
9. Add the following 8-bit two’s complement binary values: 00100100 + 01000110.

10. Subtract the following 8-bit two’s complement binary values: 00001110 - 00111000. by the complement-and-add method.