

Class work (Chapter-2)

1. Express each decimal number in binary as an 8-bit sign-magnitude number:
(a) -85 (b) +100 (c) -113
2. Express each decimal number as an 8-bit number in the 1's complement form:
(a) -65 (b) +126 (c) -98
3. Express each decimal number as an 8-bit number in the 2's complement form:
(a) -58 (b) +112 (c) -136
4. Determine the decimal value of each signed binary number in the sign-magnitude form:
(a) 10011101 (b) 01110100 (c) 10111011
5. Determine the decimal value of each signed binary number in the 1's complement form:
(a) 10111001 (b) 01100100 (c) 10111101
6. Determine the decimal value of each signed binary number in the 2's complement form:
(a) 10111011 (b) 01010100 (c) 10011000
7. Convert each pair of decimal numbers to binary and add using the 2's complement form(8bit representation) :
(a) -38 and -27 (b) 59 and -39 (c) -58 and 65 (d) -102 and -85