DIGITAL LOGIC DESIGN

1st Semester, 2023 – 2024

Quiz #1 (Fri)

Tip: You can note base N (decimal, binary, octal,...) number by putting the "N" subscript beside the number. Ex: 167 (decimal) = 167_{10} or $167_{(10)}$ $101 = 101_2$ or $101_{(2)}$



Conver the following unsigned binary numbers into decimal:

- (a) 1110 =
- (b) 11000 =
- (c) 1011101 =

Problem 2:

Determine the 1's and 2's complement of each binary number:

- (a) 11011010
- (b) 01110110
- (c) 10000101

Problem 3:

Convert each hexadecimal number to decimal:

- (a) $8D_{16} =$
- (b) $F3_{16} =$
- (c) $EB_{16} =$

Problem 4:

Convert each of the following decimal number to BCD:

- (a) 21 =
- (b) 36 =
- (c) 69 =

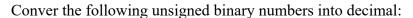
DIGITAL LOGIC DESIGN

1st Semester, 2023 – 2024

Quiz #1 (Wed)

Tip: You can note base N (decimal, binary, octal,...) number by putting the "N" subscript beside the number. Ex: 167 (decimal) = 167_{10} or $167_{(10)}$ $101 = 101_2$ or $101_{(2)}$





- (d) 1110 =
- (e) 11010 =
- (f) 1101101 =

Problem 2:

Determine the 1's and 2's complement of each binary number:

- (d) 11010011
- (e) 01010110
- (f) 10100101

Problem 3:

Convert each hexadecimal number to decimal:

- (d) $D8_{16} =$
- (e) $3F_{16} =$
- (f) $BE_{16} =$

Problem 4:

Convert each of the following decimal number to BCD:

- (d) 12 =
- (e) 63 =
- (f) 96 =