Chương 1: Number systems and codes

Dạng 1: Dạng dữ liệu biểu diễn trên máy tính.

1.34 List the ASCII code for the 10 decimal digits with an even parity bit in the leftmost position

Dạng 2: Các Đơn vị đo dữ liệu (bits, byte, word,…)

1.2\* What is the exact number of bytes in a system that contains

a.32K bytes

b.64M bytes

c.6.4G bytes

1.32 What bit must be complemented to change an ASCII letter from capital to Lowercase and vice versa?

Dạng 3: So sánh sự khác nhau giữa ngôn ngữ bậc cao và bậc thấp

Dạng 4: Các thành phần trong máy tính Computer (CPU, RAM, HĐ,BUS,…)

Dạng 5: Chuyển đổi qua lại giữa các hệ đếm

1.25 Represent the decimal number 6,248 in

(a) BCD

(B) excess-3 code

(c) 2421 code

(d) a 6311 code

1.30 The following is a string of ASCIl characters whose bit patterns have been converted into hexadecimal for compactness:73 F4 E5 76 ES 4A EF62 73. Of the eight bits in each pair of digits, the leftmost is a parity bit.The remaining bits are the ASCIl code. (a) Convert the string to bit fom and decode the ASCIL. (b) Determine the parity used: odd or even?

1.33 The state of a 12-bit register is 100010010111. What is its content if it represents

(a) Three decimal digits in BCD?

(b) Three decimal digits in the excess-3 code?

(c) Three decimal digits in the 84-2-1 code?

(d) A binary number?

Dạng 6: Bù 1, Bù 2.

1.26 Find the 9's complement of decimal 6,248 and express it in 2421 code. Show that the result is the 1's complement of the answer to (c) in CR\_PROBlem 1.25. This demonstrates that the 2421 code is self-complementing.