National University of Computer and Emerging Sciences

Assignment # 1

CS301 – COAL

Fall 2021

Question No 1:

Why we prefer developing in high level language over low level language and write the steps of conversion from HL to LL.

Question No 2:

Provide a comparison between High level language and assembly language with respect different Type of Applications.

Question No 3:

How many machine levels have there and briefly described them.

Question No 4:

Convert (86T1) Hexadecimal to Binary and then convert that Binary to Decimal.

Question No 5:

a. Finds Two's compliment of these unsigned the numbers
  1. 26
  2. 99
  3. 181

b. Convert (consider signed numbers)
  1. 10101001 (binary to Decimal)
  2. -85 (Decimal to Binary)
  3. 8124 (Decimal to Hexadecimal)

Question No 6:

Create truth table of (¬X∧Y) ∨ (Y∧¬Z)

Question No 7:

Briefly explain memory hierarchy.

Question No 8:

What is registers and the difference between special purpose registers and general-purpose register? Explain the segments in registers.

Question no 9:

What is difference between Flag Segment and Multi-Segment Model?

Question No 10:

Explain paging.