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Department : BS (CS 5th)

Subject : Assemble language

Assignment : No = 1

Assignment No = (1)

Q1: What is the relationship b/w high level language and machine language?

Ans: High level program must be translated into machine language. They can be as binary numbers. These are ~~not~~ meant to be used by a man not read or write syntax. They are closer to human languages.

Q2 Explain the concept of Portability as it applied to programming language.

Ans: A language whose source program can be compiled and run on a wide variety of computer systems is said to be portable.

Q3: Give the example of an embedded system applications?

12)

Q:4 What is a device driver?

Ans: The device driver is a program that translates general operating system commands into specific reference to hardware details that the manufacturer knows.

Q:5: Why would a high level language not be an ideal tool for writing a program that directly accesses a particular brand of printer?

Ans, a high level language may be preferred for direct hardware access, even if it does, awkward coding techniques must often be used, resulting in possible maintenance problems.

Q6 Translate the following C++ expression to assembly language, using the examples presented earlier in this chapter as a

Q7 In your own words describe virtual machine concept?

Ans: Virtual machine concept are constructed in layer, so each layer represented a translation layer from a higher level in set to a lower level in set.

Q8: Why was unicode invented?

Ans: Unicode is a universal computer standard to represent texts must writing system. It was invented to store most of the world characters. It started during 1987.

(9) In your word describe the virtual concepts.

Ans: A (VM) virtual machine can be a software program or operating system that could execute the instructions of

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(10) What is the hexa decimal representation of the binary

1100 111 0001

(Ans) :

The hexa decimal of binary no 1100 111 0001

$(CF57)_{16}$

(11) What is the binary representation of hexa decimal no?

ESBAED7?

Ans: (110 0101 1011 0110 1110 1101 0111)₂

141

What is the binary representation of hexa decimal no?

13: What is the sum of integers:

$$00001111 + 00001111$$

$$\begin{array}{r} 0000\overset{\textcircled{0}}{0}\overset{\textcircled{0}}{1}\overset{\textcircled{0}}{1}\overset{\textcircled{0}}{1} \\ + 00001111 \\ \hline 0001110 \end{array}$$

$$(0001110)$$

(14) What is decimal representation of the following unsigned binary 1111000?

Ans: $1 \times 2^7 + 1 \times 2^6 + 1 \times 2^5 + 1 \times 2^4 + 1 \times 2^3$

(1)

14) Create a Truth Table to show possible input and output for Boolean Function describe by

Ans

(Truth Table)

$$\neg (X \vee Y)$$

X	\bar{X}	Y	$\bar{X} \vee Y$
T	F	T	T
T	F	F	F
F	T	T	T
F	T	F	T

(15) What is the value of expression $(T \wedge F) \vee T$

6) What is the decimal value of the signed binary 10110101

Ans

1 0 1 1 0
128 64 32 16 8

$$\Rightarrow 128 + 64 + 32 + 16$$

$$\Rightarrow 128 + 32 + 16$$

-75

19) Convert a 16-bit signed no 7F9B to dec

Q. What is the 16-bit
representation of signed
integer -26?

Ans,

26

16	26
	1

10 =

26 \Rightarrow 1A

\Rightarrow 1A \Rightarrow 0001 1010

1110 0101 \leftarrow 1st