

CCA - 1 Retest - Div A

9 Nov 2022

ANSWER ALL 4 QUESTIONS

Q 1 - Write down the result of the following Bit-wise Operations -

- $0xF0 \ \& \ 0x0F$
- $0x00 \ \wedge \ 0x0F$
- $0x33 \ | \ 0xCC$

Q 2 - Convert -

- From Decimal to Hex: 100, 16, 129
- From Hex to Binary: $0xF0$, $0x123$, $0x98$
- From Binary to Hex:
 - 00011100 (3 zeros + 3 ones + 2 zeros)
 - 111110011 (5 ones + 2 zeros + 2 ones)
 - 11111110 (7 ones + 1 zero)

Q 3 - Given - `int x = 0x2D;`

Write a code snippets to do the following -

- Create a pointer variable pX and make it point to the variable x
- Using the pointer variable pX, double the value stored at x
- Write the expected answer of X **after doubling in Decimal, Hex and Binary**

Q 4 - Explain in 6-8 lines-

“Function parameters and local variables inside the function are “local” in scope. These variables are accessible only within the function and are not accessible when the function execution returns to the caller function”.

A. Write a **suitable example C code and a diagram** to illustrate your answer.