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CIS341

Week2 Weekly Assignment

Prob1:

#include <stdio.h>

unsigned int getLast1byte(unsigned int hex){

    return("%02x", hex & 0x000000FF);

}

unsigned int getFirst3bytes(unsigned int hex){

    return("%02x", hex & 0xFFFFFF00);

}

void combineFirstThreeLastOne(hexa1,hexa2){

    printf("%02x", hexa1 | hexa2);

}

int main(){

    unsigned int hex1 , hex2;

    printf("Please enter first hex num: ");

    scanf("%X", &hex1);

    printf("\nPlease enter second hex num: ");

    scanf("%X", &hex2);

    printf("\nProblem 1 is:");

    combineFirstThreeLastOne(getFirst3bytes(hex1),getLast1byte(hex2));

    printf("\n");

}

Prob2:

#include <stdio.h>

int Qa(int x){

       return !!x;

}

int Qb(int x){

    return !x;

}

int Qc(int x){

    return !!(x & 0xFF);

}

int Qd(int x){

    return !!(~x & 0xFF);

}

void main(){

    int w = sizeof(int) << 3;

    int eq1 = ~0;

    int eq2 =  0;

    int eq3 = 0xFF;

    int eq4 = 0xFF << (w - 8);

    (Qa(eq1));

    (Qb(eq2));

    (Qc(eq3));

    (Qd(eq4));

}

Prob3:

A: 0xC00E

B:0xFFFE