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Problem 1: Write a function in C language to sort of a list integers; the order of sorting (i.e. ascending or descending) will be passed to the function as argument.

Solve:

```
#include <stdio.h>

void sort(int *arr, int size, int order);

int main(){
    int size, order;
    size = 10;
    int arr[10];
    printf("Enter the elements of the array: ");
    for (int i = 0; i < size; i++){
        scanf("%d", &arr[i]);
    }
    printf("Enter the order of sorting (1 for ascending, 0 for descending): ");
    scanf("%d", &order);
    sort(arr, size, order);
    printf("The sorted array is: ");
    for (int i = 0; i < size; i++){
        printf("%d ", arr[i]);
    }
    printf("\n");
    return 0;
}
void sort(int *arr, int size, int order){
    int temp;
    if (order == 1){
        for (int i = 0; i < size; i++){
            for (int j = i + 1; j < size; j++){
                if (arr[i] > arr[j])
                {
                    temp = arr[j];
                    arr[j] = arr[i];
                    arr[i] = temp;
                }
            }
        }
    }
    else{
        for (int i = 0; i < size; i++){
            for (int j = i + 1; j < size; j++){
                if (arr[i] < arr[j])
                {
                    temp = arr[j];
                    arr[j] = arr[i];
                    arr[i] = temp;
                }
            }
        }
    }
}
```

Problem 2: Write a C function to determine the LCM of given two integers.
Write a complete C program to determine the LCM of any set of integers using this function.

Solve:

```
#include <stdio.h>

int lcm(int a, int b);

int main(){
    int n, a, b;
    printf("How many integers do you want to find the LCM of?: ");
    scanf("%d", &n);
    printf("Enter the integers: ");
    scanf("%d %d", &a, &b);
    int l = lcm(a, b);
    for (int i = 2; i < n; i++){
        scanf("%d", &a);
        l = lcm(l, a);
    }
    printf("The LCM is %d\n", l);
    return 0;
}

int lcm(int a, int b){
    int i = 1;
    while (1){
        if (i % a == 0 && i % b == 0)
        {
            return i;
        }
        i++;
    }
}
```