Exercise 4: Memory Management, File Systems

Task 1: Memory Management

T1-1: The array can't be initialized on the stack, it is too big, so the easiest solution is to allocate it on the heap.

T1-2: The update function tried to access indeces of array to that were not in range of SIZE (the random generated numbers in init()). To solve the problem I added the modulo operator, so that the the index is valid. I don't know a condition to update the value at a specific index, but this change, solves the problem without changing anything outside the update function. . .

T1-3: *CLASSIC MEMORY LEAK*: The problem was that the count_sort function calls calloc() for temp, but never frees the memory again. If you call it in loop, the programm allocates every time memory for a new temp, but does not free the memory of the old temps.