

A common method to store records in a file is the random-access file, where all the file is viewed as a byte stream and all the records has the same size. One of the advantage of random-access file is that it can directly manipulate any position in byte of the file. Your goal is to write a program to create and manipulate a random-access file.

Requirement: Read the binary input from file stream rather than the standard input stream. Also write the binary output to the file stream rather than the standard output stream.

Input

The input is also a random-access file named as “**test_input_RandomAccess.txt**” which contains 50000 records. Each record includes a unsigned integer as the offset value, and a character as the byte value.

Output

Create a 64 MB random-access file named as “**my_output_RandomAccess.txt**”. Use the input offset and byte value to manipulate the corresponding bytes in the random-access file. For example, for a record with input offset 30 and byte value 20, you should modify the 30th byte in random-access file by the value 20. Note that the input offset is started from 0.

(Hint: to create a large size of array, you should dynamically allocate the memory through the following expression:

type pointer = (type*) malloc(size);*

where *type* is the data type you need and *size* is the array size you need.

Remember to free the memory through

free(pointer);

when you no longer need to use the space, possibly before the end of your program.)

Sample Input

No visible sample input.

Sample Output

No visible sample output.