Task

A school teacher has a list of leftover school supplies from previous semesters. The teacher has asked you to write a program that can help search for supplies. Write a program that reads in the data (a list of supplies in random order) from a file and write the search result to the output file. The user will enter the name of the supply for searching. For example, “pencil”. The result should include all supplies with name that exactly matches the name being searched.

Assume the input file has the format of name, color, followed by quantity (int) with each type of supply on a separate line:

crayon, blue, 16

pencil, purple, 20

pencil box, red, 6

glue stick, orange, 23

Requirements

- The input file name is "supply.csv". Download supply.csv.
- The output file should be named as "result.csv". Download animals.
- The user will enter the name of the supply for searching. For example, “pencil box". Use read_line function to read this.
- The data file has the format of name (string), color (string), and quantity (int), with each type of supply on a separate line.
- Use fscanf to read data. The format specifier **"%[^,], %[^,], %d\n"** for fscanf to read a line of input.
- Assume that there are no more than 200 supply items in the file.
- Assume the name and color are no more than 100 characters.
- Your program needs to keep track of the number of supplies in the file as it reads from it.
- The program should be built around an array of supply structures, with each supply containing information of name, color, and quantity. Use another array of supply to store the search result.
- Include the following function:

int search(struct supply list[], int n, struct supply result[], char *search_name);

The function searches in the array list for all the supplies matching search_name, and store the result in the array result. n is the number of supply in the array list. The function returns the number of supply that matches search_name and stored in the result array.

- Output files should be in the same format as input file(name, color, and quantity) that includes the matching supplies. For example, the content of the output file for a search for crayon:

crayon, blue, 16

crayon, purple, 12

crayon, red, 8

...

- Follow the format of the examples below.

Example (your program must follow this format precisely)

```
Enter supply: crayon
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