Task

In this project, you will write a program that checks each word stored in a file, if it is some string written twice in a row. For example, the words "coco", "murmur" are some strings written twice in a row ("co" for "coco", "mur" for "murmur"). But the words "boba" and "radar" are not some strings written twice in a row. Your program will first ask the user to enter the file name, open and read the file, then write the words that are some strings written twice in a row to the output file.

Requirements

- The name of the input file will be entered by the user.
- Assume the input text does not have more than 1000 words, and each words does not have more than 100 characters. Assume there are no punctuations in the file.
- Assume the input file name does not exceed 100 characters. Use input.txt to test your program.
- The output file name should be "output.txt".
- Your program should include the following function: int is_square(char * word);
 The function expects word to be a string containing or
 - The function expects word to be a string containing one of the words in the input file. The function returns 1 if word is a some string written twice in a row, and returns 0 otherwise.
- main function writes to the output file.

Example (your program must follow this format precisely)

Enter file name: input.txt

Example of content of input file and expected output file

input.txt

radar

murmur

gold

antinganting

format

output.txt

murmur

antinganting