

# HOMework 5

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Write a C program to implement the following requirement:

## Input:

The program will read from standard input any text up to 10,000 characters and store each word (a string that does not contain any whitespace with a maximum of 100 characters) into a tree node of a Binary Search Tree (BST), using the following struct:

```
struct TREENODE {
    char *word;
    Struct TREENODE *parent
    struct TREENODE *left;
    struct TREENODE *right;
};
```

The word should be converted into **lowercase** before adding to the BST.

In this BST, each node stores a **unique** word (duplicated words are not added to the tree).

## Output:

The program will print to standard output 2 things:

- The list of words in **reverse alphabetical** order, each word is separated by a single comma ",".
- The list of words after removing words that start with a vowel (a, e, i, o, u) in **alphabetical** order, each word is separated by a single comma ",".

**Note:** If there is no word in the input text, the program must print empty string to stdout.

## REQUIREMENT:

You must implement **addNode**, and **deleteNode** functions for the BST. Otherwise, you will get 0.

**SAMPLE INPUT 1**

THIS is a huge elephant.

**SAMPLE OUTPUT 1**

this,is,huge,elephant,a  
huge,this

**SAMPLE INPUT 2**

First line is            here

Second line is here

Third line is here

**SAMPLE OUTPUT 2**

third,second,line,is,here,first  
first,here,line,second,third