C++ OOP – Regular Exam – 25 August 2024

1. Trees

You've got a class object hierarchy structure with the following members:

Tree

- Pine
- Oak
- Maple

Each tree has distinguished features, but they all share base class, which you must complete in order to achieve working program.

Study the skeleton and provide **`Tree.h`** and the completion of any other missing method, so that the program compiles and provides the correct output.

Input

A list of identifiers (**`pine`**, **`oak`** or **`maple`**), which describe which tree must be added to the list, ending with `**end**`.

Output

An ordered list of the distinctive features for each tree type from the input.

Examples

Input	Output

`pine maple oak maple end`	`1. Pine tree with rounded leaves, which produces needles and cones and is great for walking under, because it's evergreen.`
	`2. Maple tree with palmate, hand-like leaves, which produces helicopter seeds and is great for maple syrup production.`
	`3. Oak tree with lobed leaves, which produces acorns and is great for wood working, because it's hard.`
	`4. Maple tree with palmate, hand-like leaves, which produces helicopter seeds and is great for maple syrup production.`

`maple pine oak oak end`	`1. Maple tree with palmate, hand-like leaves, which produces helicopter seeds and is great for maple syrup production.`
	`2. Pine tree with rounded leaves, which produces needles and cones and is great for walking under, because it's evergreen.`
	`3. Oak tree with lobed leaves, which produces acorns and is great for wood working, because it's hard.`
	`4. Oak tree with lobed leaves, which produces acorns and is great for wood working, because it's hard.`