Problem 3 - Hero Recruitment

Create a program that keeps track of enrolled heroes and their collection of spells (spellbook). You will be receiving the following commands until you receive the command **"End"**:

- **"Enroll {HeroName}"**:
  - Adds the hero to your collection of heroes.
  - If the hero is already present in your collection, print: **"{HeroName} is already enrolled."**
- **"Learn {HeroName} {SpellName}"**:
  - Adds the spell to the hero's spellbook.
  - If the hero does not exist in the collection, print: **"{HeroName} doesn't exist."**
  - If the hero already has the spell in his spellbook, print: **"{HeroName} has already learnt {SpellName}."**
- **"Unlearn {HeroName} {SpellName}"**:
  - Removes the spell from the hero's spellbook.
  - If the hero doesn't exist in the collection, print: **"{HeroName} doesn't exist."**
  - If the spell doesn't exist in the hero's spellbook, print: **"{HeroName} doesn't know {SpellName}."**
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After receiving the **"End"** command, print all the heroes:

"Heroes:
== {name1}: {spell1}, {spell2}, {spelln}
== {name2}: {spell1}, {spell2}, {spelln}
…
== {nameN}: {spell1}, {spell2}, {spelln}"

Input / Constraints

- You will be receiving **lines** until you receive the **"End"** command.

Output

- Print the **heroes** in the **format** described above.

Examples

Input	Output
Enroll Stefan Enroll Peter Enroll Stefan Learn Stefan ItShouldWork Learn John ItShouldNotWork Unlearn George Dispel Unlearn Stefan ItShouldWork End	Stefan is already enrolled. John doesn't exist. George doesn't exist. Heroes: == Stefan: == Peter:
Enroll Stefan Learn Stefan ItShouldWork Learn Stefan ItShouldWork Unlearn Stefan NotFound End	Stefan has already learnt ItShouldWork. Stefan doesn't know NotFound. Heroes: == Stefan: ItShouldWork

Enroll Stefan Enroll Peter Enroll John Learn Stefan Spell Learn Peter Dispel End	Heroes: == Stefan: Spell == Peter: Dispel == John:

JS Examples

The input will be provided as an array of strings.

Input	Output
["Enroll Stefan", "Enroll Peter", "Enroll Stefan", "Learn Stefan ItShouldWork", "Learn John ItShouldNotWork", "Unlearn George Dispel", "Unlearn Stefan ItShouldWork", "End"])	Stefan is already enrolled. John doesn't exist. George doesn't exist. Heroes: == Stefan: == Peter:
["Enroll Stefan", "Learn Stefan ItShouldWork", "Learn Stefan ItShouldWork", "Unlearn Stefan NotFound", "End"])	Stefan has already learnt ItShouldWork. Stefan doesn't know NotFound. Heroes: == Stefan: ItShouldWork
["Enroll Stefan", "Enroll Peter", "Enroll John", "Learn Stefan Spell", "Learn Peter Dispel", "End"])	Heroes: == Stefan: Spell == Peter: Dispel == John: