## SoftUni Parking

SoftUni just got a new **parking lot**. It's so fancy, it even has online **parking validation**. Except the online service doesn't work. It can only receive users' data, but it doesn't know what to do with it. Good thing you're on the dev team and know how to fix it, right?

Write a program, which validates a parking place for an online service. Users can **register** to park and **unregister** to leave.

The program **receives 2 types of commands**:

* "register {username} {licensePlateNumber}":
  + The system only supports **one car per user** at the moment, so if a user tries to register **another license plate**, using the **same username**, the system should print:  
    "ERROR: already registered with plate number {licensePlateNumber}"
  + If the aforementioned checks passes successfully, the plate can be registered, so the system should print:  
     **"{****username} registered {licensePlateNumber} successfully"**
* "unregister {username}":
  + If the user is **not present** in the database, the system should print:  
    "ERROR: user {username} not found"
  + If the aforementioned check passes successfully, the system should print:  
    "{username} unregistered successfully"

After you execute all of the commands, **print** all the currently **registered users** and their **license plates** in the format:

* "**{username} => {licensePlateNumber}**"

### Input

* First line: **n** - **number of commands** - **integer**
* Next **n** lines: **commands** in one of the **two** possible formats:
  + Register: "register {username} {licensePlateNumber}"
  + Unregister: "unregister {username}"

The input will **always** be **valid** and you **do not need** to check it explicitly.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 5  register John CS1234JS  register George JAVA123S  register Andy AB4142CD  register Jesica VR1223EE  unregister Andy | John registered CS1234JS successfully  George registered JAVA123S successfully  Andy registered AB4142CD successfully  Jesica registered VR1223EE successfully  Andy unregistered successfully  John => CS1234JS  George => JAVA123S  Jesica => VR1223EE |
| 4  register Jony AA4132BB  register Jony AA4132BB  register Linda AA9999BB  unregister Jony | Jony registered AA4132BB successfully  ERROR: already registered with plate number AA4132BB  Linda registered AA9999BB successfully  Jony unregistered successfully  Linda => AA9999BB |
| 6  register Jacob MM1111XX  register Anthony AB1111XX  unregister Jacob  register Joshua DD1111XX  unregister Lily  register Samantha AA9999BB | Jacob registered MM1111XX successfully  Anthony registered AB1111XX successfully  Jacob unregistered successfully  Joshua registered DD1111XX successfully  ERROR: user Lily not found  Samantha registered AA9999BB successfully  Anthony => AB1111XX  Joshua => DD1111XX  Samantha => AA9999BB |