**Boss Rush**

*Ah, look who arrived, the latecomer. Let me repeat our plan for our friend here. There is a hoard of demons in this room. We must first identify them before we can proceed.*

Create a program that **checks** if **inputs** are **valid** and **decrypt it**. On the **first** line you will **receive** a **number** that **indicates** how **many inputs** you will **receive** on the **next** lines.

You will read lines with a boss name and title and you should check if they are valid, considering the following rules:

* **Boss** - the name should be in **upper case letters**, should be minimum **four letters long** and should be surrounded by **"|"**
* **Title** - contains **exactly 2 words** and they **contain** only alphabetical letters and **1 whitespace** between them. The title should be surrounded by **"#"**
* The name and title **should be split by a single ":"**

**Example for a valid input:** |GEORGI|:#Lead architect#

If the input is valid. Print in the following format:

**"{boss name}, The {title}**

**>> Strength: {length of the name}**

**>> Armour: {length of the title}"**

If the input is invalid, print **"Access denied!"**

* **Input / Constraints**
* On the **1st line**, you will receive a **number** of inputs.
* On the next **n lines**, you will have to **check** if a boss has a **valid name and title**.
* **Output**
* **Print** the **output** with the **format described above.**
* **Examples**

|  |  |
| --- | --- |
| **Input** | **Output** |
| 3  |GEORGI|:#Lead architect#  |Hristo|:#High Overseer#  |STEFAN|:#Assistant Game Developer# | GEORGI, The Lead architect  >> Strength: 6  >> Armour: 14  Access denied!  Access denied! |
| **Input** | **Output** |
| 3  |PETER|:#H1gh Overseer#  |IVAN|:#Master detective#  |KARL|: #Marketing lead# | Access denied!  IVAN, The Master detective  >> Strength: 4  >> Armour: 16  Access denied! |