**Query Strings Mess**

Ivancho participates in a team project with colleagues at SoftUni. They have to develop JavaScript application, but something mysterious happened – at the last moment all team members… disappeared! And guess what? He is left alone to finish the project. All that is left to do is to parse the input data and store it in a special way, but Ivancho has no idea how to do that! Can you help him?

**Input**  
The input is passed to the first JavaScript function found in your code as array of query strings. For each field of the form, the query string contains a pair field=value. Within each pair, the field name and value are separated by an equals sign, '='. The series of pairs are separated by the ampersand, '&’. The question mark is used as a separator and is not part of the query string. URL query string may contain another URL as value. The input data will always be valid and in the format described. There is no need to check it explicitly.

**Output**  
Print at single line each processed string as follows: key=[value]nextkey=[another value] … etc.   
Multiple whitespace characters should be reduced to one inside value/key names, but there shouldn’t be any whitespaces before/after extracted keys and values. If a key already exists, the value is added with comma and whitespace after other values of the existing key in current string. See the given examples below.

**Constraints**

SPACE is encoded as '+' or "%20 Letters (A–Z and a–z), numbers (0–9), the characters '\*','-','.' and '\_' and other not-special symbols are left as-is

Allowed working time: 0.2 seconds. Allowed memory: 16 MB.

**Examples**

|  |  |
| --- | --- |
| Input | Output |
| login=student&password=student | login=[student]password=[student] |
| Input | |
| field=value1&field=value2&field=value3  <http://example.com/over/there?name=ferret> | |
| Output | |
| field=[value1, value2, value3]  name=[ferret] | |
| Input | |
| foo=%20foo&value=+val&foo+=5+%20+203  foo=poo%20&value=valley&dog=wow+  url=https://softuni.bg/trainings/coursesinstances/details/1070  https://softuni.bg/trainings.asp?trainer=nakov&course=oop&course=php | |
| Output | |
| foo=[foo, 5 203]value=[val]  foo=[poo]value=[valley]dog=[wow]  url=[https://softuni.bg/trainings/coursesinstances/details/1070]  trainer=[nakov]course=[oop, php] | |