# Problem 3 – Largest Rectangle

Write a PHP script to **find the largest rectangular area** **in a rectangular matrix** of strings. The area should hold equal cells at its **borders**. The area size is calculated by the classical formula **width \* height**.

### Input

The input comes as **JSON-encoded matrix of strings** and will be read from an **HTTP GET** **request** holding a parameter named **jsonTable**.

### Output

The output should be a **HTML table** that visually shows the largest rectangular area of equal border cells in the matrix, colored by changing the border cells' background to **#CCC** (see the examples below). If **several areas of equal border cells** have the same size, find the one that starts at the smallest possible row and at the smallest possible column at that row. Ensure all your cell data is correctly encoded as HTML (use the **htmlspecialchars()** function). **Follow strictly the sample HTML output format below**.

### Constraints

* The input JSON string will always contain an array of arrays of strings having a rectangular form.
* The minimal size of the matrix will be 1 x 1. The maximum matrix size will be 20 x 20.
* Allowed working time: 0.2 seconds. Allowed memory: 16 MB.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output - Visualized** |
| [["xx","a","a","a","a","a","a"],["a","a","z","z","a","php","a"],["a","a","x","x","a","a","a"],["xx","a","sql","a","a","js","a"],["xx","a","a","a","a","a","a"],["xx","a","z","z","a","php","w"]] |  |
| **Output** | |
| <table border='1' cellpadding='5'><tr><td>xx</td><td style='background:#CCC'>a</td><td style='background:#CCC'>a</td><td style='background:#CCC'>a</td><td style='background:#CCC'>a</td><td style='background:#CCC'>a</td><td style='background:#CCC'>a</td></tr><tr><td>a</td><td style='background:#CCC'>a</td><td>z</td><td>z</td><td>a</td><td>php</td><td style='background:#CCC'>a</td></tr><tr><td>a</td><td style='background:#CCC'>a</td><td>x</td><td>x</td><td>a</td><td>a</td><td style='background:#CCC'>a</td></tr><tr><td>xx</td><td style='background:#CCC'>a</td><td>sql</td><td>a</td><td>a</td><td>js</td><td style='background:#CCC'>a</td></tr><tr><td>xx</td><td style='background:#CCC'>a</td><td style='background:#CCC'>a</td><td style='background:#CCC'>a</td><td style='background:#CCC'>a</td><td style='background:#CCC'>a</td><td style='background:#CCC'>a</td></tr><tr><td>xx</td><td>a</td><td>z</td><td>z</td><td>a</td><td>php</td><td>w</td></tr></table> | |