|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **State** | **Input** | | | | | | | | | | | | **Goto** | | | | | | |
|  | **{** | **}** | **[** | **]** | **,** | **:** | **string** | **number** | **true** | **false** | **null** | **$** | S | O | A | M | P | E | V |
| 0 | s4 |  | s5 |  |  |  |  |  |  |  |  |  | 1 | 2 | 3 |  |  |  |  |
| 1 |  |  |  |  |  |  |  |  |  |  |  | acc |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  | r1 |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  | r2 |  |  |  |  |  |  |  |
| 4 |  | s6 |  |  |  |  | s9 |  |  |  |  |  |  |  |  | 7 | 8 |  |  |
| 5 | s4 |  | s5 | s12 |  |  | s17 | s18 | s19 | s20 | s21 |  |  | 14 | 15 |  |  | 13 | 16 |
| 6 |  | r3 |  | r3 | r3 |  |  |  |  |  |  | r3 |  |  |  |  |  |  |  |
| 7 |  | s27 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 |  | r6 |  |  | s10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  | s23 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 |  |  |  |  |  |  | s9 |  |  |  |  |  |  |  |  | 11 | 8 |  |  |
| 11 |  | r5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 |  | r9 |  | r9 | r9 |  |  |  |  |  |  | r9 |  |  |  |  |  |  |  |
| 13 |  |  |  | s22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 |  | r14 |  | r14 | r14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 |  | r15 |  | r15 | r15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 |  |  |  | r11 | s25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 |  | r12 |  | r12 | r12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 |  | r13 |  | r13 | r13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 |  | r16 |  | r16 | r16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 |  | r17 |  | r17 | r17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 |  | r18 |  | r18 | r18 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 |  | r8 |  | r8 | r8 |  |  |  |  |  |  | r8 |  |  |  |  |  |  |  |
| 23 | s4 |  | s5 |  |  |  | s17 | s18 | s19 | s20 | s21 |  |  | 14 | 15 |  |  |  | 24 |
| 24 |  | r7 |  |  | r7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | s4 |  | s5 |  |  |  | s17 | s18 | s19 | s20 | s21 |  |  | 14 | 15 |  |  | 26 | 16 |
| 26 |  |  |  | r10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 27 |  | r4 |  | r4 | r4 |  |  |  |  |  |  | r4 |  |  |  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| r# | Productions | | | Symbols |
| 0 | S’ | → | S | 1 |
| 1 | S | → | O | 1 |
| 2 | S | → | A | 1 |
| 3 | O | → | **{ }** | 2 |
| 4 | O | → | **{** M **}** | 3 |
| 5 | M | → | P**,** M | 3 |
| 6 | M | → | P | 1 |
| 7 | P | → | **string :** V | 3 |
| 8 | A | → | **[** E **]** | 3 |
| 9 | A | → | **[ ]** | 2 |
| 10 | E | → | V**,** E | 3 |
| 11 | E | → | V | 1 |
| 12 | V | → | **string** | 1 |
| 13 | V | → | **number** | 1 |
| 14 | V | → | O | 1 |
| 15 | V | → | A | 1 |
| 16 | V | → | **true** | 1 |
| 17 | V | → | **false** | 1 |
| 18 | V | → | **null** | 1 |

|  |  |  |
| --- | --- | --- |
|  | First | Follow |
| S’ | **{**, **[** | $ |
| S | **{**, **[** | $ |
| O | **{** | $, **,**, **],}** |
| M | **string** | **}** |
| P | **string** | **,**, **}** |
| A | **[** | $, **,**, **],}** |
| E | **string**, **number**, **true**, **false**, **null**, **{**, **[** | **]** |
| V | **string, number, true, false, null, {, [** | **,**, **]**, **}** |