

|    |    | alpha  | (         | [         | )       | ]       | eps    |
|----|----|--------|-----------|-----------|---------|---------|--------|
| q0 | Z0 | q0, Z0 | q1, X1 Z0 | q1, X2 Z0 |         |         |        |
|    | X1 | q0, X1 |           |           |         |         |        |
|    | X2 | q0, X2 |           |           |         |         |        |
| q1 | Z0 | q1, Z0 | q1, X1 Z0 | q1, X2 Z0 |         |         | q2, Z0 |
|    | X1 | q1, X1 | q1, X1 X1 | q1, X2 X1 | q1, eps |         |        |
|    | X2 | q1, X2 | q1, X1 X2 | q1, X2 X2 |         | q1, eps |        |
| q2 | Z0 |        |           |           |         |         |        |
|    | X1 |        |           |           |         |         |        |
|    | X2 |        |           |           |         |         |        |

alpha denotes any symbol that is neither of (, ), [, ]

q0 is the initial state and q2 is the final state

q0 ensures that there is at least an open parantheses or bracket

|    |                        |          |
|----|------------------------|----------|
| q0 | a[2*(i+1)], (b[i] - 1) | Z0       |
| q0 | [2*(i+1)], (b[i] - 1)  | Z0       |
| q1 | 2*(i+1)], (b[i]-1)     | X2 Z0    |
| q1 | *(i+1)], (b[i]-1)      | X2 Z0    |
| q1 | (i+1)], (b[i]-1)       | X2 Z0    |
| q1 | i+1)], (b[i]-1)        | X1 X2 Z0 |
| q1 | i+1)], (b[i]-1)        | X1 X2 Z0 |
| q1 | " +1)], (b[i]-1)"      | X1 X2 Z0 |
| q1 | 1)], (b[i]-1)          | X1 X2 Z0 |
| q1 | )], (b[i]-1)           | X1 X2 Z0 |
| q1 | ], (b[i]-1)            | X2 Z0    |
| q1 | (b[i]-1)               | Z0       |
| q1 | b[i]-1)                | X1 Z0    |
| q1 | [i]-1)                 | X1 Z0    |
| q1 | i]-1)                  | X2 X1 Z0 |
| q1 | ]-1)                   | X2 X1 Z0 |
| q1 | "-1)"                  | X1 Z0    |
| q1 | 1)                     | X1 Z0    |
| q1 | )                      | X1 Z0    |
| q1 | eps                    | Z0       |
| q2 | eps                    | Z0       |