

1. Go to start, go right and try to find a or b, if found first a - replace a with A and go step 2, if found first b - go right and try to find a, if found - reject, if not found - go to step 7.
2. Go right till first b, if no b - reject.
3. Go right to first a, if found - replace a with A, go step 2, if not found - go left to start.
4. Go right till a or b.
5. If found b go right till first a, if a found - reject, if not found - go to step 7.
6. If found a - replace with A and go step 2.
7. Go to start and go right till A or b, if found first b - replace with B
8. Go right till A, if not found - go step 7. If found -