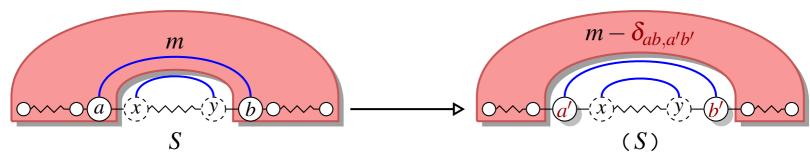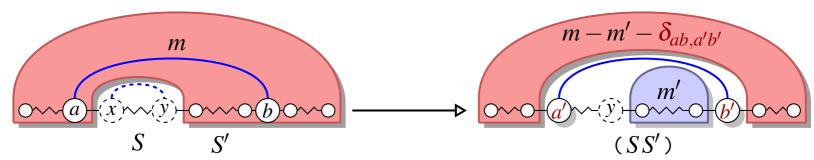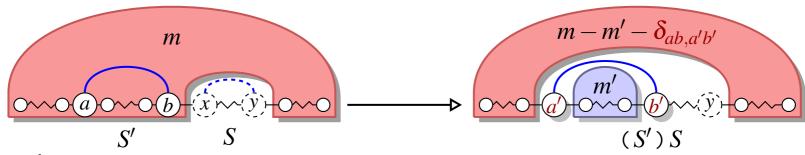**Case 1**: Left innermost position is unpaired.

Case 2: Paired innermost positions, leading to stacking base-pairs.

Case 3: Next leftward position is paired to the right, but no stacking pairs.

Case 4: Next leftward position is paired to the left.