

Explanation

The characters marked red are the ones that can be deleted so that the string does not have matching adjacent characters.

A**AAA** -> A (3 deletions)

B**BBBB** -> B (4 deletions)

ABABABAB -> ABABABAB (0 deletions)

BABABA -> BABABA (0 deletions)

A**A**B**BB** -> AB (4 deletions)