String Builder

1. Challenge: Reverse a string using StringBuilder

public class ReverseString {

public static void main(String[] args) {

String input = "OpenAI";

StringBuilder sb = new StringBuilder(input);

System.out.println("Reversed: " + sb.reverse());

}

}

2. Challenge: Append multiple strings using StringBuilder and print

public class AppendStrings {

public static void main(String[] args) {

StringBuilder sb = new StringBuilder();

sb.append("Hello, ");

sb.append("this is ");

sb.append("a concatenated string.");

System.out.println(sb.toString());

}

}

3. Challenge: Replace characters in a string using StringBuilder

public class ReplaceCharacters {

public static void main(String[] args) {

StringBuilder sb = new StringBuilder("hello world");

sb.setCharAt(6, 'W'); // Replacing 'w' with 'W'

System.out.println("Modified: " + sb.toString());

}

}

4. Challenge: Insert a word into a string at a specific position

public class InsertWord {

public static void main(String[] args) {

StringBuilder sb = new StringBuilder("I Java");

sb.insert(2, "love "); // Inserting at index 2

System.out.println(sb.toString()); // Output: I love Java

}

}

5. Challenge: Delete part of a string using StringBuilder

public class DeleteSubstring {

public static void main(String[] args) {

StringBuilder sb = new StringBuilder("RemoveThisPart");

sb.delete(0, 6); // Deletes "Remove"

System.out.println("After deletion: " + sb.toString()); // Output: ThisPart

}

}