**Day 32\_Java Assignment**

**1. Problem Description:**

Reverse the string in place.

Example:

Input: maha

Output: aham

**2. My Solution:**

**package** daily\_assesment;

**public** **class** ReverseString {

**public** **static** **void** main(String[] args) {

String input = "Surya";

StringBuilder reversed = **new** StringBuilder();

**for** (**int** i = input.length() - 1; i >= 0; i--) {

**char** ch = input.charAt(i);

reversed.append(ch);

}

System.***out***.println("Original Word: " + input);

System.***out***.println("Reversed Word: " + reversed);

}

}

**Explanation:**

* Here, using StringBuilder to reverse the string is crucial for memory efficiency. Unlike strings, which are immutable and create a new object with each modification, StringBuilder is mutable, eliminating the need for multiple object creations during the reversal process.

**Output:**

Original Word: Surya

Reversed Word: ayruS