

Assignment 17 - StringBuilder

Problem:

Write a program using the `StringBuilder` class to perform the following operations:

1. Create a `StringBuilder` object with the text: `"Hello World!"`.
2. Append the text `" How are you?"` to it.
3. Insert the text `"Java "` at the beginning.
4. Replace the word `"World"` with `"Universe"`.
5. Delete the `!` at the end of `"Hello Universe!"`.
6. Reverse the entire string.

After performing each operation, print the updated string to observe the changes.

Expected Output (Step-by-step):

1. Initial: `"Hello World!"`
 2. After appending: `"Hello World! How are you?"`
 3. After inserting: `"Java Hello World! How are you?"`
 4. After replacing: `"Java Hello Universe! How are you?"`
 5. After deleting: `"Java Hello Universe How are you?"`
 6. After reversing: `"uoy era woH esrevinU olleH avaJ"`
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Instructions:

- Use appropriate methods of the `StringBuilder` class for each operation.
- Avoid using plain `String` methods; stick to `StringBuilder` functionalities.

This assignment will help you understand how `StringBuilder` can be used for efficient string manipulation.