5. Create a method which can perform a particular String operation based on the user's choice. The method should accept the String object and the user's choice and return the output of the operation. Options are

A: Add the String to itself
B: Replace alternate positions with *
C: Remove duplicate characters in the String
D: Change alternate characters to upper case

Method Name	changeString
Method Description	Modify the string based on user choice
Argument	String string, char ch
Return Type	String
Logic	Perform the required operation based on the user choice and return the resulting string

```
public static String changeString(String string, char ch) {
 // Perform the required operation based on the user choice
 switch (ch) {
  case 'A':
   // Add the string to itself
   return string + string;
  case 'B':
   // Replace alternate positions with *
   StringBuilder sb = new StringBuilder();
   for (int i = 0; i < string.length(); i++) {
    if (i % 2 == 0) {
     sb.append(string.charAt(i));
    } else {
     sb.append('*');
    }
   }
   return sb.toString();
  case 'C':
   // Remove duplicate characters in the string
   StringBuilder result = new StringBuilder();
   for (int i = 0; i < string.length(); i++) {
    if (!result.toString().contains(String.valueOf(string.charAt(i)))) {
```

```
        result.append(string.charAt(i));
      }
    }
    return result.toString();
  case 'D':
    // Change alternate characters to upper case
    StringBuilder sb2 = new StringBuilder();
    for (int i = 0; i < string.length(); i++) {
      if (i % 2 == 0) {
        sb2.append(Character.toLowerCase(string.charAt(i)));
      } else {
        sb2.append(Character.toUpperCase(string.charAt(i)));
      }
    }
    return sb2.toString();
  default:
    return "Invalid choice";
 }
}
```