

Encoding Three Strings

The method is expected to

✓ Step One: Given any three strings, break each string into 3 parts each

For Example – If the three strings are as below

input1 = "John"

input2 = "Johny"

input3 = "Janardhan"

- "John" should be split into "J", "oh", "n" as the FRONT, MIDDLE and END parts respectively.
 - "Johny" should be split into "Jo", "h", "ny" as the FRONT, MIDDLE and END parts respectively.
 - "Jonardhan" should be split into "Jan", "ard", "han" as the FRONT, MIDDLE and END parts respectively.
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- ❖ i.e. if the number of characters in the string are in multiples of 3, then each split-part will contain equal number of characters, as seen in the example of "Janardhan"
 - ❖ if the number of characters in the string are in multiples of 3, and if there is one character more than multiple of 3, then the MIDDLE part will get the extra character, as seen in the example of "John"
 - ❖ if the number of characters in the string are in multiples of 3, and if there are two characters more than multiple of 3, then FRONT and END parts will get one extra character each, as seen in the example of "Johny"

- ✓ **Step Two:** Concatenate (join) the FRONT, MIDDLE and END parts of the strings as per the below specified concatenation rule to form three output strings

output1 = FRONT part of input1 + MIDDLE part of input2 + END part of input3

output2 = MIDDLE part of input1 + END part of input2 + FRONT part of input3

output3 = END part of input1 + FRONT part of input2 + MIDDLE part of input3

For Example – for the above specified example input strings,

output1 = “J” + “h” + “han” = “Jhhan”

output2 = “oh” + “ny” + “Jan” = “ohnyJan”

output3 = “n” + “Jo” + “ard” = “nJoard”

- ✓ **Step Three:** Process the resulting output strings based on the output-processing rule
- After the above two steps, we will now have three output strings. Further processing is required only for the third output string as per below rule
 - ❖ “Toggle the case of each character in the string”, i.e. in the third output string, all lower-case characters and vice versa
 - ❖ For example. For the above example strings, output3 is “nJoard”, so after applying the toggle rule, output3 should become “NjOARD”
- ✓ **Final Result:** The three output strings after applying the above three steps is the final result. i.e. for the above example,

output1 = “Jhhan”

output2 = “ohnyJan”

output3 = “NjOARD”

Program Structure to be used

```
Class EncodingThreeStrings {

    public static String output1;
    public static String output2;
    public static String output3;

    public static void main(String [] args) {

        encodeThreeStrings("John", "Johny", "Janardhan");
        //check your test cases here

    }

    public static void encodeThreeStrings(String input1, String input2, String input3) {

        // Code here
        output1= // assign the output1 value at the end
        output2 = // assign the output2 value at the end
        output3 = // assign the output3 value at the end

    }

}
```