

```
import java.util.Scanner;
```

```
class BauerStringLab{
```

```
    public static String[] ordering(String txt){
```

```
        String[] txt_arr = txt.split(" ");
```

```
        // Sort in alphabetical order.
```

```
        String temp;
```

```
        for(int a = 0; a < 5; a++)
```

```
            for(int b = a + 1; b < 5; b++)
```

```
                // Compare two strings.
```

```
                if(txt_arr[a].compareTo(txt_arr[b]) > 0){
```

```
                    temp = txt_arr[a];
```

```
                    txt_arr[a] = txt_arr[b];
```

```
                    txt_arr[b] = temp;
```

```
                }
```

```
        return txt_arr;
```

```
    }
```

```
    public static String piglatin(String word){
```

```
        char wrd_0 = word.charAt(0);
```

```
        // Check if first character of the word is a vowel.
```

```
        if(wrd_0=='a' || wrd_0=='A' || wrd_0=='e' || wrd_0=='E' || wrd_0=='i'  
|| wrd_0=='I' || wrd_0=='o' || wrd_0=='O' || wrd_0=='u' || wrd_0=='U'){
```

```
            word = word+"yay";
```

```
}else{  
    word = word.substring(1)+wrd_0+"ay";  
}
```

```
    return word;  
}
```

```
public static String reverse(String word){  
    int last_ind = word.length()-1;  
    // Take the string between the first and last letters of the word.  
    String mid_str = word.substring(1, last_ind);  
    // Switch the first and last letters of the word.  
    String reverse_wrd = word.charAt(last_ind) + mid_str +  
word.charAt(0);  
  
    return reverse_wrd;  
}
```

```
public static String mix(String word_1, String word_2){  
    int word_1_len = word_1.length();  
    int word_1_split_len = word_1.length()/2;  
    int word_2_len = word_2.length();  
    int word_2_split_len = word_2.length()/2;  
  
    // Split each word into two parts, at around the middle.  
    String word_1a = word_1.substring(0, word_1_split_len);  
    String word_1b = word_1.substring(word_1_split_len);
```

```
String word_2a = word_2.substring(0, word_2_split_len);
String word_2b = word_2.substring(word_2_split_len);

return word_1a + word_2b + " " + word_2a + word_1b;
}
```

```
public static void main(String[] args){
    // Taking input string from user.
    Scanner input = new Scanner(System.in);
    // Save the input.
    String txt = input.nextLine();

    // Part 1
    // Jonathan Bauer
    String[] ordered_arr = ordering(txt);
    String ordered_str = String.join(" ", ordered_arr);
    System.out.println("Part 1: " + ordered_str);

    // Part 2
    // Jonathan Bauer
    String piglatin_str = piglatin(ordered_arr[0]) + " " +
    piglatin(ordered_arr[1]);
    System.out.println("Part 2: " + piglatin_str);
}
```

```
// Part 3

// Jonathan Bauer

String reverse_str = reverse(ordered_arr[1])+"
"+reverse(ordered_arr[2]);

System.out.println("Part 3: " + reverse_str);


// Part 4

// Jonathan Bauer

String mix_str = mix(ordered_arr[3], ordered_arr[4]);

System.out.println("Part 4: " + mix_str);

}

}
```