```
1 package regextalk.password.toshow;
 3 import java.util.Arrays;
 4 import java.util.regex.Matcher;
 5 import java.util.regex.Pattern;
 6
 7 public class Password02RegexTwoRules {
      public static final String SPECIAL CHARS = "><?.,!@#$%^&*+= )(\\}\\{\\]</pre>
 9
      public static final String LKA LOWER = "(?=.*[a-z])";
                                                              //LKA:
   lookahead
      public static final String LKA UPPER = "(?=.*[A-Z])";
10
11
      public static final String LKA DIGIT = "(?=.*[0-9])";
      public static final String LKA SPECIAL = "(?=.*[" + SPECIAL CHARS +
   "1)";
13
      private static final String REGEX = "" +
14
15
         "^" +
                                               //start of input
            "(?:" +
16
                                               //non capturing group
17
               LKA LOWER + LKA UPPER +
                                                     //Option 1
18
               "|" +
                                                        //or
19
               LKA LOWER + LKA DIGIT +
                                                     //Option 2
20
               "|" +
                                                        //or
21
               LKA LOWER + LKA SPECIAL +
                                                     //Option 3
22
               "|" +
                                                        //or
23
               LKA UPPER + LKA DIGIT +
                                                     //Option 4
24
               "|" +
                                                        //or
25
               LKA UPPER + LKA SPECIAL +
                                                     //Option 5
26
               "|" +
                                                        //or
27
                                                     //Option 6
               LKA DIGIT + LKA SPECIAL +
28
                                               //end of non-capturing group
         "[A-Za-z0-9" + SPECIAL CHARS + "]" + //All possible characters
29
30
         "{8,24}" +
                                                //8 to 24 chars
         "$";
31
                                                //end of input
32
33
      public static void main(String[] ignored) {
34
         String regex = REGEX;
35
         String[] inputs = Password01RegexThreeRules.newInputs();
36
37
         Matcher matcher = Pattern.compile(regex).matcher("ignored input");
38
39
         Arrays.stream(inputs).forEach(input -> {
40
41
            boolean valid = matcher.reset(input).find();
42
            System.out.printf("\"%s\" is %s password.%n", input, (valid ? "a
43
  VALID" : "an invalid"));
         });
44
45
     }
46 }
47
```