

src\Password.java

```
1  import java.util.Scanner;
2
3  @SuppressWarnings("resource")
4  public class Password {
5      public static void main(String[] args) {
6          System.out.println(ulidGenerator());
7          System.out.println(passwordChecker());
8
9      }
10     public static String ulidGenerator(){
11         Scanner in = new Scanner(System.in);
12         boolean validFirstName = false;
13         boolean validLastName = false;
14         String first = "";
15         String middle = "";
16         String last = "";
17         String ulid = "";
18
19         while(!validFirstName){
20             System.out.print("Please enter your first name:");
21             first = in.nextLine();
22             validFirstName = (first.length() > 0);
23             if (validFirstName){
24                 first = first.substring(0, 1);
25             }
26         }
27         System.out.print("Please enter your middle name:");
28         middle = in.nextLine();
29         if (middle != ""){
30             middle = middle.substring(0,1);
31         }
32         while(!validLastName){
33             System.out.print("Please enter your last name:");
34             last = in.nextLine();
35             validLastName = (last.length() > 0);
36             if (last.length() < 5 && validLastName){
37                 last = last.substring(0, last.length());
38             }else{
39                 last = last.substring(0,5);
40             }
41         }
42         ulid = (first + middle + last).toLowerCase();
43         return ulid;
44     }
45     public static String passwordChecker(){
46         Scanner in = new Scanner(System.in);
47         String password = "";
48         String confirmedpassword = "";
49         boolean isValid = false;
50
51         while (!isValid) {
52             System.out.print("Please enter a password:");
53             password = in.nextLine();
```

```
54     boolean checkCase = checkCase(password);
55     boolean checkLength = checkLength(password);
56     boolean checkNum = checkNum(password);
57     if (checkCase && checkLength && checkNum){
58         isValid = true;
59     }
60     if (!checkCase){
61         System.out.println("The password must include 1 upper and lower case");
62     }
63     if (!checkLength){
64         System.out.println("The password must be at least 8 characters");
65     }
66     if (!checkNum){
67         System.out.println("The password must include 1 number");
68     }
69     if (isValid){
70         System.out.print("Please repeat your password:");
71         confirmedpassword = in.nextLine();
72         if (!password.equals(confirmedpassword)){
73             isValid = !isValid;
74         }
75     }
76 }
77 return password;
78 }
79 public static boolean checkLength(String password){
80     return password.length() >= 8;
81 }
82 public static boolean checkCase(String password){
83     int uppCase = 0;
84     int lowCase = 0;
85     for (int i = 0; i < password.length(); i++){
86         if (Character.isUpperCase(password.charAt(i))){
87             uppCase++;
88         }
89         if (Character.isLowerCase(password.charAt(i))){
90             lowCase++;
91         }
92     }
93     return uppCase > 0 && lowCase > 0;
94 }
95 public static boolean checkNum(String password){
96     String nums = "0123456789";
97     int numCount = 0;
98     for (int i = 0; i < password.length(); i++) {
99         for (int j = 0; j < nums.length(); j++) {
100             if (password.charAt(i) == nums.charAt(j))
101                 numCount++;
102         }
103     }
104     return numCount > 0;
105 }
106 }
107 }
```