## Use Passay to Generate Random Password and OTP (One Time Password)

Passay is Java Library that is used to generate secure Random Passwords and can also be used to generate random One Time Passwords.

Passay is available at Maven repository www.mvnrepository.com

// set number of lower case characters

LCR.setNumberOfCharacters(2);

Dependency for Passay is

```
<dependencies>
<dependency>
  <groupId>org.passay
  <artifactId>passay</artifactId>
  <version>1.6.3</version>
</dependency>
  </dependencies>
Following is the code to generate random password of length 8 with 4 Upper Case Letters, 2 Lower
Case Letters and 2 Digits
Code also generates OTP with 4 random digits.
Following is the code
import org.passay.CharacterRule;
import org.passay.EnglishCharacterData;
import org.passay.PasswordGenerator;
/**
* @author raman
*/
public class Passay {
  public static void main(String[] args) {
    CharacterRule LCR = new CharacterRule(EnglishCharacterData.LowerCase);
```

```
// create character rule for upper case
    CharacterRule UCR = new CharacterRule(EnglishCharacterData.UpperCase);
    // set number of upper case characters
    UCR.setNumberOfCharacters(4);
    // create character rule for digit
    CharacterRule DR = new CharacterRule(EnglishCharacterData.Digit);
    // set number of digits
    DR.setNumberOfCharacters(2);
    // create instance of the PasswordGenerator class
    PasswordGenerator passGen = new PasswordGenerator();
    // call generatePassword() method of PasswordGenerator class to get Passay generated
password
    String password = passGen.generatePassword(8, LCR, UCR, DR);
   String otp=passGen.generatePassword(4, DR);
   System.out.println("Random Password" + password);
   System.out.println("OTP of length 4 is " + otp);
  }
Output
```

Random Password wYW6bY4K

OTP of length 4 is 7583