TASK :1 JAVA

**Create a password**

**generator**

**import java.security.SecureRandom;**

**import java.util.Scanner;**

**public class PasswordGenerator {**

**private static final String CHAR\_LOWER = "abcdefghijklmnopqrstuvwxyz";**

**private static final String CHAR\_UPPER = CHAR\_LOWER.toUpperCase();**

**private static final String NUMBER = "0123456789";**

**private static final String SPECIAL\_CHARS = "!@#$%^&\*\_=+-/";**

**private static final String PASSWORD\_CHARS = CHAR\_LOWER + CHAR\_UPPER + NUMBER + SPECIAL\_CHARS;**

**public static void main(String[] args) {**

**Scanner scanner = new Scanner(System.in);**

**System.out.print("Enter the length of the password: ");**

**int passwordLength = scanner.nextInt();**

**String generatedPassword = generatePassword(passwordLength);**

**System.out.println("Generated Password: " + generatedPassword);**

**}**

**public static String generatePassword(int length) {**

**SecureRandom random = new SecureRandom();**

**StringBuilder sb = new StringBuilder(length);**

**for (int i = 0; i < length; i++) {**

**int randomIndex = random.nextInt(PASSWORD\_CHARS.length());**

**char randomChar = PASSWORD\_CHARS.charAt(randomIndex);**

**sb.append(randomChar);**

**}**

**return sb.toString();**

**}**

**}**