**import java.util.Scanner;**

**public class CaesarCipher**

**{**

**public static final String ALPHABET = "abcdefghijklmnopqrstuvwxyz";**

**public static String encrypt(String plainText, int shiftKey)**

**{**

**plainText = plainText.toLowerCase();**

**String cipherText = "";**

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

**{**

**int charPosition = ALPHABET.indexOf(plainText.charAt(i));**

**int keyVal = (shiftKey + charPosition) % 26;**

**char replaceVal = ALPHABET.charAt(keyVal);**

**cipherText += replaceVal;**

**}**

**return cipherText;**

**}**

**public static String decrypt(String cipherText, int shiftKey)**

**{**

**cipherText = cipherText.toLowerCase();**

**String plainText = "";**

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

**{**

**int charPosition = ALPHABET.indexOf(cipherText.charAt(i));**

**int keyVal = (charPosition - shiftKey) % 26;**

**if (keyVal < 0)**

**{**

**keyVal = ALPHABET.length() + keyVal;**

**}**

**char replaceVal = ALPHABET.charAt(keyVal);**

**plainText += replaceVal;**

**}**

**return plainText;**

**}**

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

**{**

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

**System.out.println("Enter the String for Encryption: ");**

**String message = new String();**

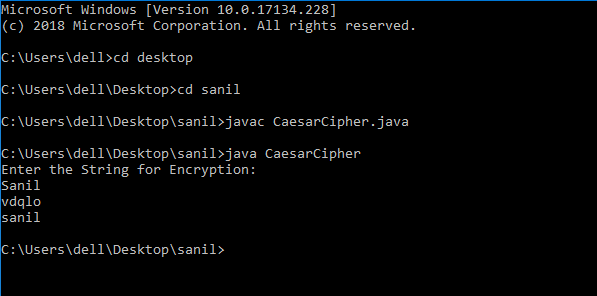
**message = sc.next();**

**System.out.println(encrypt(message, 3));**

**System.out.println(decrypt(encrypt(message, 3), 3));**

**sc.close();**

**}**

**}**