**PROGRAM:**

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();

}

}

**OUTPUT:**

