import javax.crypto.\*;

import javax.crypto.spec.SecretKeySpec;

import java.util.Base64;

import java.util.Scanner;

public class DESExample {

public static void main(String[] args) throws Exception {

Scanner scanner = new Scanner(System.in);

System.out.println("Enter your message:");

String message = scanner.nextLine();

System.out.println("Enter your secret key (8 characters):");

String key = scanner.nextLine();

String encryptedMessage = encrypt(message, key);

System.out.println("Encrypted message: " + encryptedMessage);

String decryptedMessage = decrypt(encryptedMessage, key);

System.out.println("Decrypted message: " + decryptedMessage);

}

public static String encrypt(String message, String key) throws Exception {

Cipher cipher = Cipher.getInstance("DES");

SecretKeySpec secretKey = new SecretKeySpec(key.getBytes(), "DES");

cipher.init(Cipher.ENCRYPT\_MODE, secretKey);

byte[] encryptedBytes = cipher.doFinal(message.getBytes());

return Base64.getEncoder().encodeToString(encryptedBytes);

}

public static String decrypt(String encryptedMessage, String key) throws Exception {

Cipher cipher = Cipher.getInstance("DES");

SecretKeySpec secretKey = new SecretKeySpec(key.getBytes(), "DES");

cipher.init(Cipher.DECRYPT\_MODE, secretKey);

byte[] decryptedBytes = cipher.doFinal(Base64.getDecoder().decode(encryptedMessage));

return new String(decryptedBytes);

}

}