

```
1 import java.util.*;
2 import java.io.BufferedReader;
3 import java.io.InputStreamReader;
4 import java.security.spec.KeySpec;
5 import javax.crypto.Cipher;
6 import javax.crypto.SecretKey;
7 import javax.crypto.SecretKeyFactory;
8 import javax.crypto.spec.DESKeySpec;
9 //import sun.misc.BASE64Decoder;
10 //import sun.misc.BASE64Encoder;
11 import java.util.Base64;
12
13 public class DES {
14     private KeySpec myKeySpec;
15     private SecretKeyFactory mySecretKeyFactory;
16     private Cipher cipher;
17     byte[] keyAsBytes;
18     private String myEncryptionKey;
19     SecretKey key;
20     static BufferedReader br = new BufferedReader(new InputStreamReader(System.i
21     public DES() throws Exception {
22         // TODO code application logic here
23         myEncryptionKey="ThisIsSecretEncryptionKey";
24         keyAsBytes=myEncryptionKey.getBytes();
25         myKeySpec=new DESKeySpec(keyAsBytes);
26         mySecretKeyFactory = SecretKeyFactory.getInstance("DES");
27         cipher = Cipher.getInstance("DES");
28         key = mySecretKeyFactory.generateSecret(myKeySpec);
29     }
30     public String encrypt(String unencryptedString)
31     { String encryptedString = null;
32     try {
33         cipher.init(Cipher.ENCRYPT_MODE, key);
34         byte[] plainText = unencryptedString.getBytes();
35         byte[] encryptedText = cipher.doFinal(plainText);
36
37
38         encryptedString = Base64.getEncoder().encodeToString(encryptedText);
39
40     }
41     catch (Exception e)
42     {
43         e.printStackTrace();
44     }
45     return encryptedString;
46     }
47
48     public String decrypt(String encryptedString)
49     { String decryptedText=null;
50     try {
```

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51 cipher.init(Cipher.DECRYPT_MODE, key);
52
53 byte[] encryptedText = Base64.getDecoder().decode(encryptedString);
54
55 byte[] plainText = cipher.doFinal(encryptedText);
56 decryptedText=new String(plainText);
57 }
58 catch (Exception e)
59 {
60 e.printStackTrace();
61 }
62 return decryptedText;
63 }
64
65
66 public static void main(String args []) throws Exception
67 {
68     DES myEncryptor= new DES();
69     System.out.print("Enter the string: ");
70     String stringToEncrypt = br.readLine();
71     String encrypted = myEncryptor.encrypt(stringToEncrypt);
72     String decrypted = myEncryptor.decrypt(encrypted);
73     System.out.println("\nString To Encrypt: " +stringToEncrypt);
74     System.out.println("\nEncrypted Value : " +encrypted);
75     System.out.println("\nDecrypted Value : " +decrypted); System.out.println("")
76 }
77 }
```