

```
1 import java.util.*;
2 import java.io.*;
3 import javax.crypto.*;
4 import javax.crypto.spec.*;
5
6
7 public class BlowFish {
8     private SecretKeySpec KS;
9     private Cipher cipher;
10    byte[] keyAsBytes;
11    private String myEncryptionKey;
12
13    static BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
14    public BlowFish() throws Exception
15    {
16        myEncryptionKey="MySecretKey";
17        keyAsBytes=myEncryptionKey.getBytes("UTF8");
18        KS = new SecretKeySpec(keyAsBytes, "Blowfish");
19        cipher = Cipher.getInstance("Blowfish");
20    }
21
22    public String encrypt(String unencryptedString)
23    { String encryptedString = null;
24
25        try {
26            cipher.init(Cipher.ENCRYPT_MODE, KS);
27            byte[] plainText = unencryptedString.getBytes("UTF8");
28            byte[] encryptedText = cipher.doFinal(plainText);
29            encryptedString = Base64.getEncoder().encodeToString(encryptedText);
30        }
31        catch (Exception e)
32        {
33            e.printStackTrace();
34        }
35        return encryptedString;
36    }
37
38    public String decrypt(String encryptedString)
39    { String decryptedText=null;
40      String dt="";
41      try {
42          cipher.init(Cipher.DECRYPT_MODE, KS);
43          byte[] encryptedText = Base64.getDecoder().decode(encryptedString);
44          byte[] plainText = cipher.doFinal(encryptedText);
45          decryptedText=new String(plainText);
46      }
47      catch (Exception e)
48      {
49          e.printStackTrace();
50      }
```

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51 return decryptedText;
52 }
53
54
55
56 public static void main(String args []) throws Exception
57 {
58     BlowFish myEncryptor= new BlowFish();
59     System.out.print("Enter the string: ");
60     String stringToEncrypt = br.readLine();
61     String encrypted = myEncryptor.encrypt(stringToEncrypt);
62     String decrypted = myEncryptor.decrypt(encrypted);
63     System.out.println("\nString To Encrypt: " +stringToEncrypt);
64     System.out.println("\nEncrypted Value : " +encrypted);
65     System.out.println("\nDecrypted Value : " +decrypted);
66 }
67 }
```