

SHA-1

Program:

```
import java.math.BigInteger;
import java.util.*;
import java.security.MessageDigest;
import java.security.NoSuchAlgorithmException;

public class sha1 {
    public static String encryptThisString(String input)
    {
        try {
            MessageDigest md = MessageDigest.getInstance("SHA-
1");

            byte[] messageDigest = md.digest(input.getBytes());
            BigInteger no = new BigInteger(1, messageDigest);
            String hashtext = no.toString(16);
            while (hashtext.length() < 32) {
                hashtext = "0" + hashtext;
            }
            return hashtext;
        }
        catch (NoSuchAlgorithmException e) {
            throw new RuntimeException(e);
        }
    }

    // Driver code
    public static void main(String args[]) throws

    NoSuchAlgorithmException
    {

        System.out.println("Enter the string to encrypt");

        //String s1 = "GeeksForGeeks";
        String s1;
        Scanner scan=new Scanner(System.in);
        s1=scan.nextLine();
        System.out.println("\n" + s1 + " : " +
encryptThisString(s1));

    }
}
```

ScreenShot:

```
C:\Users\Niranjana>javac sha1.java

C:\Users\Niranjana>java sha1
Enter the string to encrypt
hello world

hello world : 2aae6c35c94fcfb415dbe95f408b9ce91ee846ed
```