

CODE:-

// Java program to calculate SHA-1 hash value

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

public class sha1 {
    public static String encryptThisString(String input)
    {
        try {
            // getInstance() method is called with algorithm SHA-1
            MessageDigest md = MessageDigest.getInstance("SHA-1");

            // digest() method is called
            // to calculate message digest of the input string
            // returned as array of byte
            byte[] messageDigest = md.digest(input.getBytes());

            // Convert byte array into signum representation
            BigInteger no = new BigInteger(1, messageDigest);

            // Convert message digest into hex value
            String hashtext = no.toString(16);

            // Add preceding 0s to make it 32 bit
            while (hashtext.length() < 32) {
                hashtext = "0" + hashtext;
            }

            // return the HashText
            return hashtext;
        }

        // For specifying wrong message digest algorithms
        catch (NoSuchAlgorithmException e) {
            throw new RuntimeException(e);
        }
    }

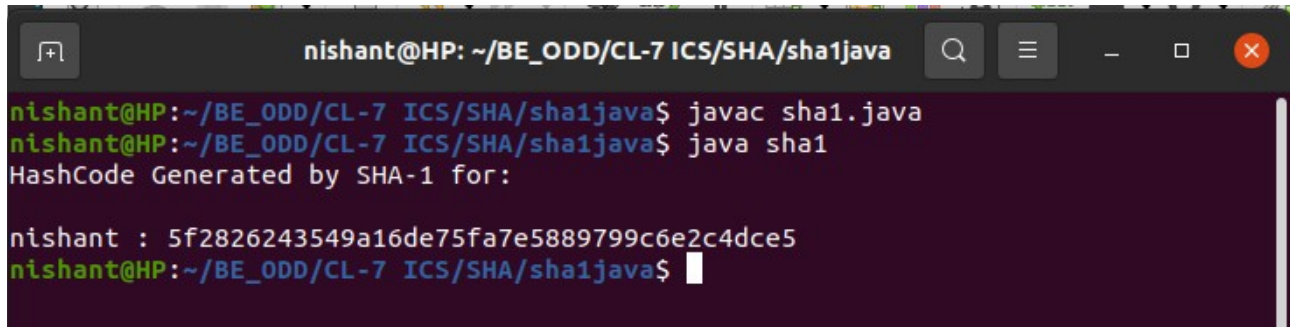
    // Driver code
    public static void main(String args[]) throws
                                                NoSuchAlgorithmException
    {

        System.out.println("HashCode Generated by SHA-1 for: ");

        String s2 = "nishant";
        System.out.println("\n" + s2 + " : " + encryptThisString(s2));
    }
}
```

}

OUTPUT:-



```
nishant@HP: ~/BE_ODD/CL-7 ICS/SHA/sha1java
nishant@HP:~/BE_ODD/CL-7 ICS/SHA/sha1java$ javac sha1.java
nishant@HP:~/BE_ODD/CL-7 ICS/SHA/sha1java$ java sha1
HashCode Generated by SHA-1 for:

nishant : 5f2826243549a16de75fa7e5889799c6e2c4dce5
nishant@HP:~/BE_ODD/CL-7 ICS/SHA/sha1java$
```