

Program 10: SHA – 1 Algorithm

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

public class JavaSHA1HashExample {

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

        String algorithmSha1 = "SHA-1";
        String inputMessage = "Secretcode";
        MessageDigest sha1MessageDigest = MessageDigest.getInstance(algorithmSha1);
        byte[] hashBytes = sha1MessageDigest.digest(inputMessage.getBytes());

        StringBuilder hexString = new StringBuilder();
        for (byte b : hashBytes) {
            hexString.append(String.format("%02x", b));
        }

        System.out.println("Message:" + inputMessage);
        System.out.println("SHA-1 Hash: " + hexString.toString());
    }
}
```