Practical 7

Aim: Write a program to implement HMAC SHA1 algorithm.

Code:

import java.security.SecureRandom;

import javax.crypto.Mac;

import javax.crypto.spec.SecretKeySpec;

import java.util.Scanner;

public class HMAC {

    public static void main(String[] args)throws Exception

    {

        Scanner sc=new Scanner(System.in);

        System.out.println("Enter Data");

        String data=sc.nextLine();

            SecureRandom rnd=new SecureRandom();

            byte[] k=new byte[100];

            rnd.nextBytes(k);

            SecretKeySpec key =new SecretKeySpec(k,"HMACSHA1");

            Mac m=Mac.getInstance("HmacSHA1");

            m.init(key);

            m.update(data.getBytes());

            byte[] result=m.doFinal();

        System.out.println("Signature using HMACSHA1:"+new String(result));

    }

}

Output:

A black screen with white text

Description automatically generated