T.Y. B.Sc. C.S. Sem-V	Roll No: **713**

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Practical no 8

AIM: Write a program to calculate HMAC-SHA1 Signature

Code:-

```
package prac8;
import java.util.Formatter;
import javax.crypto.*;
import javax.crypto.spec.SecretKeySpec;

public class HmacSha1 {
	private static String toHexString(byte[] bytes){
		Formatter formatter = new Formatter();
		for(byte b : bytes)
		{
			formatter.format("%02x" , b);
		}
		return formatter.toString();
		}

	public static String calculateHMAC(String data , String key) throws Exception
	{
		SecretKeySpec signingKey = new SecretKeySpec(key.getBytes() , "HmacSHA1");
		Mac mac = Mac.getInstance("HmacSHA1");
		mac.init(signingKey);
```

```
            return toHexString(mac.doFinal(data.getBytes()));
        }

        public static void main(String[] args) throws Exception
        {
            String hmac = calculateHMAC("krunal", "dhavle");
            System.out.println("HMAC-SHA1 ------------------------------");
            System.out.println("performed by krunal dhavle 713");
            System.out.println(hmac);
        }
}
```

Output:-