package ro.ase.petricamariuscosmin.sap;

import java.io.BufferedReader;

import java.io.File;

import java.io.FileNotFoundException;

import java.io.FileReader;

import java.io.IOException;

import java.io.PrintWriter;

import java.security.MessageDigest;

import java.security.NoSuchAlgorithmException;

public class assignment {

public static void printHex(byte[] values, String description) {

System.out.println("\nHex value for: " + description);

for(byte value : values) {

System.out.printf("%02x",value);

}

}

public static String toHex(byte[] values, String description) {

StringBuilder sb = new StringBuilder();

for (byte byteno : values) {

sb.append(String.format("%02x", byteno));

}

String finalString = sb.toString();

return finalString;

}

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

long tstart = System.currentTimeMillis();

String myVal="82e14169ced3bd6612336fe774e90dc7eb2e302f8bcc6aef4ef46cbf6267db34";

File inputMessage = new File("ignis-10M.txt");

if(!inputMessage.exists()) {

System.out.println("The input file is missing!\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");

}else {

FileReader reader = new FileReader(inputMessage);

BufferedReader bReader = new BufferedReader(reader);

String line="";

while(line !=null) {

line=bReader.readLine();

if(line!=null) {

//System.out.println("File line: "+line);

//ADD SALT

String newline = "ismsap" + line;

////////////System.out.println("Newline: " + newline);

//HASHING MD5

MessageDigest messageDigestMd5 = MessageDigest.getInstance("MD5");

messageDigestMd5.update(newline.getBytes());

byte[] Md5Val = messageDigestMd5.digest();

///////System.out.println("MD5 toHex: " + toHex(Md5Val, "MD5"));

//HASHING SHA-256

MessageDigest messageDigestSha = MessageDigest.getInstance("SHA-256");

messageDigestSha.update(Md5Val);

byte[] ShaValue = messageDigestSha.digest();

//String stringHash = new String(messageDigest.digest());

//System.out.println("\nstring hash: " + stringHash);

//printHex(ShaValue, "SHA-256");

////////System.out.println("SHA toHex: " + toHex(ShaValue, "SHA-256"));

////////System.out.println("VAL toHex: " + myVal);

////////System.out.println("Line number: " + i);

if(toHex(ShaValue, "SHA-256").equals(myVal)) {

/\*

\* File messageFile = new File("mypassword.txt"); if(!messageFile.exists()) {

\* messageFile.createNewFile(); }

\*

\* PrintWriter pWriter = new PrintWriter(messageFile); pWriter.println(line);

\* pWriter.close();

\*/

System.out.println("My password is: " + line);

line = null;

}

}

}

reader.close();

long tfinal = System.currentTimeMillis();

System.out.println("Duration is : " + (tfinal-tstart));

}

}

}