import java.util.Scanner;

public class JavaClass230 {

public static void main(String[] args) {

int min =10;

int max=16;

int digit=0;

int special=0;

int upCount=0;

int loCount=0;

String password;

System.out.println("Please enter a complex password to meet security standards after you create a valid password");

System.out.println("Enter a secret word to help remember your password ");

Scanner scan = new Scanner(System.in);

System.out.println(" Enter a Password:");

password = scan.nextLine();

if(password.length()>=min&&password.length()<=max){

for(int i =0;i<password.length();i++){

char c = password.charAt(i);

if(Character.isUpperCase(c)){

upCount++;

}

if(Character.isLowerCase(c)){

loCount++;

}

if(Character.isDigit(c)){

digit++;

}

if(c>=33&&c<=46||c==64){

special++;

}

}

if(special>=1&&loCount>=1&&upCount>=1&&digit>=1){

Scanner myObj = new Scanner(System.in);

System.out.println("This a valid password");

System.out.println("Enter a secret word");

String Sword = myObj.nextLine();

System.out.println("word recieved");

String str,Newstr=" ";

System.out.print("Re-enter your password again to to be encrypted: ");

try {

Scanner in=new Scanner(System.in);

str=in.nextLine();

for (int i=0;i<str.length();i++)

{

char ch=Character.toLowerCase(str.charAt(i));

switch (ch)

{

case 'a':

Newstr=Newstr+"{";

break;

case 'b':

Newstr=Newstr+"}";

break;

case 'c':

Newstr=Newstr+"#";

break;

case 'd':

Newstr=Newstr+"~";

break;

case 'e':

Newstr=Newstr+"+";

break;

case 'f':

Newstr=Newstr+"-";

break;

case 'g':

Newstr=Newstr+"\*";

break;

case 'h':

Newstr=Newstr+"@";

break;

case 'i':

Newstr=Newstr+"/";

break;

case 'j':

Newstr=Newstr+"\\";

break;

case 'k':

Newstr=Newstr+"?";

break;

case 'l':

Newstr=Newstr+"$";

break;

case 'm':

Newstr=Newstr+"!";

break;

case 'n':

Newstr=Newstr+"^";

break;

case 'o':

Newstr=Newstr+"(";

break;

case 'p':

Newstr=Newstr+")";

break;

case 'q':

Newstr=Newstr+"<";

break;

case 'r':

Newstr=Newstr+">";

break;

case 's' :

Newstr=Newstr+"=";

break;

case 't':

Newstr=Newstr+";";

break;

case 'u':

Newstr=Newstr+",";

break;

case 'v' :

Newstr=Newstr+"\_";

break;

case 'w':

Newstr=Newstr+"[";

break;

case 'x' :

Newstr=Newstr+"]";

break;

case 'y':

Newstr=Newstr+":";

break;

case 'z' :

Newstr=Newstr+"\"";

break;

case ' ' :

Newstr=Newstr+" ";

break;

case '.':

Newstr=Newstr+'3';

break;

case ',':

Newstr=Newstr+"1";

break;

case '(':

Newstr=Newstr+'4';

break;

case '\"':

Newstr=Newstr+'5';

break;

case ')' :

Newstr=Newstr+"7";

break;

case '?' :

Newstr= Newstr+"2";

break;

case '!':

Newstr= Newstr+"8";

break;

case '-' :

Newstr= Newstr+"6";

break;

case '%' :

Newstr = Newstr+"9";

break;

case '1':

Newstr=Newstr+"r";

break;

case '2':

Newstr=Newstr+"k";

break;

case '3':

Newstr=Newstr+"b";

break;

case '4':

Newstr = Newstr+"e";

break;

case '5':

Newstr = Newstr+"q";

break;

case '6':

Newstr = Newstr+"h";

break;

case '7':

Newstr = Newstr+"u";

break;

case '8' :

Newstr= Newstr+"y";

break;

case '9':

Newstr = Newstr+"w";

break;

case '0':

Newstr = Newstr+"z";

break;

default:

Newstr=Newstr+"0";

break;

}

}

}

catch(Exception ioe)

{

ioe.printStackTrace();

}

System.out.println("The encrypted password is: \n" +Newstr);

}

}

if(password.length()<min){

for(int i =0;i<password.length();i++){

char c = password.charAt(i);

if(Character.isLowerCase(c)){

loCount++;

}

}

if(loCount>0){

System.out.println(" Password must be atleat "+min+" characters:");

System.out.println(" You did not meet requirements for upper case");

System.out.println(" You did not meet requirements for numbers");

System.out.println(" You did not meet requiremnts for special chracter");

}

}

else if(password.length()<min&&upCount>1){

for(int i =0;i<password.length();i++){

char c =password.charAt(i);

if(Character.isLowerCase(c)){

loCount++;

}

if(Character.isUpperCase(c)){

upCount++;

}

}

if(loCount>0&&upCount>0){

System.out.println(" Password must be atleast "+min+" chracters:");

System.out.println(" You need atleast one digit:");

System.out.println(" You need atleast one special chracter:");

}

}

if(password.length()>max||password.length()>=max&&upCount>1&&loCount>1&&digit>1){

System.out.println(" Password has exceeded the limit .Limit is "+max+" chracters:");

System.out.println(" You need atleast one special chracter:");

}

if(password.length()>=min&&password.length()<=max&&loCount>0&&upCount>0&&digit>0&&special==0){

System.out.println(" You need atleast a special chracter");

}

if(password.length()>=min&&password.length()<=max&&loCount>0&&upCount>0&&digit==0&&special==0){

System.out.println(" You need atleast one digit:");

System.out.println(" You need atleast one special chracter:");

}

}

}