**Aim:-**

Task1: Write a program to take input string and print largest continuous sub string. Eg. abmnopxyz then, output is: mnop

**Program:-**

package org.tasks;

import java.util.ArrayList;

import java.util.List;

import java.util.Scanner;

import java.util.TreeMap;

public class LongestStringSequence {

public static void main(String[] args) {

Scanner in = new Scanner(System.in);

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

String s=in.next();

List<Character> li = new ArrayList<Character>();

TreeMap<Integer, List<Character>> tm = new TreeMap<Integer, List<Character>>();

char c[] =s.toCharArray();

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

{

if(i==c.length-1)

{

if(c[i]-1==c[i-1])

{

li.add(c[i]);

tm.put(li.size(),li);

li=new ArrayList<Character>();

break;

}

}

else if(c[i]+1==c[i+1])

{

li.add(c[i]);

}

else

{

if(li.isEmpty())

{

continue;

}

else

{

li.add(c[i]);

tm.put(li.size(),li);

li=new ArrayList<Character>();

}

}

}

System.out.println("Longest String Sequence:"+tm.get(tm.lastKey()));

}

}

**Aim:-**

Task2: Write a program to take input as integer array, and find out the element which is nth biggest perfect square.

Eg. 1, 49, 25, 144, 81, 36, 256 and if n= 4, then 49

**Program:-**

import java.io.\*;

import java.util.\*;

import java.lang.\*;

class Sam36

{

public static void main(String args[])

{

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

Scanner in =new Scanner(System.in);

int n =in.nextInt();

int a[]=new int[n];

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

for(int i=0;i<n;i++)

a[i]=in.nextInt();

Arrays.sort(a);

System.out.println("enter n");

int n1=in.nextInt();

System.out.println("val");

int count=0;

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

{

int root=(int)Math.sqrt(new Double(a[i]));

if(root\*root==a[i])

{

if(count==n1-1)

{

System.out.println(a[i]);

break;

}

count++;

}

}

}

}

**Aim:-**

Task3: If input is amount in rupees, then find out the 1000's, 100's, 10's and 1's count. Eg. 18755 then output is 18, 7, 5, 5

**Program:-**

#include<stdio.h>

#include<math.h>

int main(){

long a,p,n,d;

printf("enter a:");

scanf("%ld",&a);

n=log10(a);

p=pow(10,n);

while(p>=1){

d=a/p;

printf("%ld------>%ld",d,p);

a=a%p;

p=p/10;

}

return 0;

}

**Aim:-**

Task4: Take a String "html" is decoded as "pbut" then write a program to decode "ajax".

**Program:-**

import java.io.\*;

import java.util.\*;

import java.lang.\*;

class Sam37

{

public static void main(String args[])

{

Scanner in =new Scanner(System.in);

System.out.println("enter string");

String s=in.next();

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

{

if(s.charAt(i)+8>122)

{

int ch =(s.charAt(i)+8)-26;

System.out.print((char)ch);

}

else

{

int ch =(s.charAt(i)+8);

System.out.print((char)ch);

}

}

}

}

**Aim:-**

Task5: Take input as number print the pattern of the below kind:

Input is 18489 then,

18489

1848

184

18

1

Only number but not string

**Program:-**

#include<stdio.h>

int main()

{

int n,i,temp;

printf("Enter no");

scanf("%d",&n);

temp=log10(n)+1;

for(i=0;i<temp;i++)

if(i==0)

printf("\n%d\n",n);

else{

n=n/10;

printf("%d\n",n);

}

return 0;

}