04-12-2020

# Welcome to Java!

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        System.out.println("Hello, World.");

        System.out.println("Hello, Java.");

    }

}

**Java Stdin and Stdout I**

**import** java.util.Scanner;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        Scanner scan = **new** Scanner(System.in);

**int** a = scan.nextInt();

**int** b = scan.nextInt();

**int** c = scan.nextInt();

        System.out.println(a);

        System.out.println(b);

        System.out.println(c);

    }

}

# Java If-Else

**import** java.io.\*;

**import** java.math.\*;

**import** java.security.\*;

**import** java.text.\*;

**import** java.util.\*;

**import** java.util.concurrent.\*;

**import** java.util.regex.\*;

**public** **class** Solution {

**private** **static** **final** Scanner scanner = **new** Scanner(System.in);

**public** **static** **void** main(String[] args) {

**int** N = scanner.nextInt();

        scanner.skip("(\r\n|[\n\r\u2028\u2029\u0085])?");

        scanner.close();

**if** (N%2 == 1){

            System.out.println("Weird");

        }

**else** **if**((N%2 == 0) && (1<N && N<6))

        {

            System.out.println("Not Weird");

        }

**else** **if**((N%2 == 0) && (5<N && N<21))

        {

           System.out.println("Weird");

        }

**else** **if**((N%2 == 0) && (N > 20))

        {

             System.out.println("Not Weird");

        }

    }

}

05-12-2020

**Java Stdin and Stdout II**

**import** java.util.Arrays;

**import** java.util.Scanner;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        Scanner scan = **new** Scanner(System.in);

**int** i = scan.nextInt();

**double** d = scan.nextDouble();

        scan.nextLine();

        String s = scan.nextLine();

        System.out.println("String: " + s);

        System.out.println("Double: " + d);

        System.out.println("Int: " + i);

    }

}

**Java Output Formatting**

**import** java.util.Scanner;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

            Scanner sc=**new** Scanner(System.in);

            System.out.println("================================");

**for**(**int** i=0;i<3;i++){

                String s1=sc.next();

**int** x=sc.nextInt();

                System.out.printf("%-15s%03d%n",s1,x);

*//Complete this line*

            }

            System.out.println("================================");

    }

}

06-12-2020

**Java Loops I**

**import** java.io.\*;

**import** java.math.\*;

**import** java.security.\*;

**import** java.text.\*;

**import** java.util.\*;

**import** java.util.concurrent.\*;

**import** java.util.regex.\*;

**public** **class** Solution {

**private** **static** **final** Scanner scanner = **new** Scanner(System.in);

**public** **static** **void** main(String[] args) {

**int** N = scanner.nextInt();

        scanner.skip("(\r\n|[\n\r\u2028\u2029\u0085])?");

        scanner.close();

**int** i;

**for**(i=1;i<=10;i++)

        {

            System.out.printf("%d x %d = %d%n",N,i,N\*i);

        }

    }

}

07-12-2020

**Java Loops II**

**import** java.lang.Math;

**import** java.util.\*;

**import** java.io.\*;

**class** Solution{

**public** **static** **void** main(String []argh){

        Scanner in = **new** Scanner(System.in);

**int** t=in.nextInt();

**for**(**int** i=0;i<t;i++){

**int** a = in.nextInt();

**int** b = in.nextInt();

**int** n = in.nextInt();

**int** s = a;

**for**(**int** j=0;j<n;j++)

        {

            s += Math.pow(2,j) \* b;

             System.out.print(s+" ");

        }

        System.out.println();

        }

        in.close();

        }

    }

09-12-2020

**Java Datatypes**

**import** java.util.\*;

**import** java.io.\*;

**class** Solution{

**public** **static** **void** main(String []argh)

    {

        Scanner sc = **new** Scanner(System.in);

**int** t=sc.nextInt();

**for**(**int** i=0;i<t;i++)

        {

**try**

            {

**long** x=sc.nextLong();

                System.out.println(x+" can be fitted in:");

**if**(x>=-128 && x<=127)System.out.println("\* byte");

**if**(x>=-32768 && x<=32767)System.out.println("\* short");

**if**(x>=-2147483648 && x<=2147483647)System.out.println("\* int");

**if**(x>=-9223372036854775808l && x<=9223372036854775807l)

                System.out.println("\* long");

*//Complete the code*

            }

**catch**(Exception e)

            {

                System.out.println(sc.next()+" can't be fitted anywhere.");

            }

        }

    }

}

12-12-2020

**Java Static Initializer Block**

**import** java.io.\*;

**import** java.util.\*;

**import** java.text.\*;

**import** java.math.\*;

**import** java.util.regex.\*;

**public** **class** Solution {

*//Write your code here*

**static** Scanner scan = **new** Scanner(System.in);

**static** **int** B = scan.nextInt();

**static** **int** H = scan.nextInt();

**static** **boolean** flag = **true**;

**static**{

**try**{

**if**(B <= 0 || H <= 0){

            flag = **false**;

**throw** **new** Exception("Breadth and height must be positive");

        }

    }**catch**(Exception e){

        System.out.println(e);

    }

}

**public** **static** **void** main(String[] args){

**if**(flag){

**int** area=B\*H;

            System.out.print(area);

        }

    }*//end of main*

}*//end of class*

13-12-2020

**import** java.util.\*;

**import** java.security.\*;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

  DoNotTerminate.forbidExit();

**try** {

   Scanner in = **new** Scanner(System.in);

**int** n = in .nextInt();

   in.close();

*//String s=???; Complete this line below*

    String s = Integer.toString(n);

*//Write your code here*

**if** (n == Integer.parseInt(s)) {

    System.out.println("Good job");

   } **else** {

    System.out.println("Wrong answer.");

   }

  } **catch** (DoNotTerminate.ExitTrappedException e) {

   System.out.println("Unsuccessful Termination!!");

  }

 }

}

*//The following class will prevent you from terminating the code using exit(0)!*

**class** DoNotTerminate {

**public** **static** **class** ExitTrappedException **extends** SecurityException {

**private** **static** **final** **long** serialVersionUID = 1;

 }

**public** **static** **void** forbidExit() {

**final** SecurityManager securityManager = **new** SecurityManager() {

   @Override

**public** **void** checkPermission(Permission permission) {

**if** (permission.getName().contains("exitVM")) {

**throw** **new** ExitTrappedException();

    }

   }

  };

  System.setSecurityManager(securityManager);

 }

}

15-12-2020

**Java Substring**

**import** java.io.\*;

**import** java.util.\*;

**import** java.text.\*;

**import** java.math.\*;

**import** java.util.regex.\*;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        Scanner in = **new** Scanner(System.in);

        String S = in.next();

**int** start = in.nextInt();

**int** end = in.nextInt();

        System.out.println(S.substring(start, end));

    }

}

**Java Currency Formatter**

**import** java.io.\*;

**import** java.util.\*;

**import** java.text.\*;

**import** java.math.\*;

**import** java.util.regex.\*;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        Scanner scanner = **new** Scanner(System.in);

**double** payment = scanner.nextDouble();

        scanner.close();

        Locale indiaLocale = **new** Locale("en", "IN");

        NumberFormat us = NumberFormat.getCurrencyInstance(Locale.US);

        NumberFormat india = NumberFormat.getCurrencyInstance(indiaLocale);

        NumberFormat china = NumberFormat.getCurrencyInstance(Locale.CHINA);

        NumberFormat france = NumberFormat.getCurrencyInstance(Locale.FRANCE);

*// Write your code here.*

        System.out.println("US: " + us.format(payment));

        System.out.println("India: " + india.format(payment));

        System.out.println("China: " + china.format(payment));

        System.out.println("France: " + france.format(payment));

    }

}

**Java Strings Introduction**

**import** java.io.\*;

**import** java.util.\*;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        Scanner sc=**new** Scanner(System.in);

        String A=sc.next();

        String B=sc.next();

        System.out.println(A.length() + B.length());

**if**(A.compareTo(B)<=0){

            System.out.println("No");

        }

**else**{

            System.out.println("Yes");

        }

        System.out.println(A.substring(0,1).toUpperCase()+A.substring(1)+" "+B.substring(0,1).toUpperCase()+B.substring(1));

*/\* Enter your code here. Print output to STDOUT. \*/*

    }

}

16-12-2020

**Java String Reverse**

**import** java.io.\*;

**import** java.util.\*;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        Scanner sc=**new** Scanner(System.in);

        String A=sc.next();

        String B = "";

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

            B = A.charAt(i)+B;

        }

**if**(A.equals(B)){

            System.out.println("Yes");

        }

**else**{

            System.out.println("No");

        }

*/\* Enter your code here. Print output to STDOUT. \*/*

    }

}

20-12-2020

**Java Inheritance I**

**import** java.io.\*;

**import** java.util.\*;

**import** java.text.\*;

**import** java.math.\*;

**import** java.util.regex.\*;

**class** Animal{

**void** walk(){

        System.out.println("I am walking");

    }

}

**class** Bird **extends** Animal{

**void** fly(){

        System.out.println("I am flying");

    }

**void** sing(){

        System.out.println("I am singing");

    }

}

**public** **class** Solution{

**public** **static** **void** main(String args[]){

      Bird bird = **new** Bird();

      bird.walk();

      bird.fly();

      bird.sing();

   }

}

22-12-2020

**Valid Username Regular Expression**

**import** java.util.Scanner;

**class** UsernameValidator {

*/\**

*\* Write regular expression here.*

*\*/*

**public** **static** **final** String regularExpression = "^[A-Za-z][A-Za-z0-9\_]{7,29}$";

}

**public** **class** Solution {

**private** **static** **final** Scanner scan = **new** Scanner(System.in);

**public** **static** **void** main(String[] args) {

**int** n = Integer.parseInt(scan.nextLine());

**while** (n-- != 0) {

            String userName = scan.nextLine();

**if** (userName.matches(UsernameValidator.regularExpression)) {

                System.out.println("Valid");

            } **else** {

                System.out.println("Invalid");

            }

        }

    }

}

23-12-2020

**Java Anagrams**

**import** java.util.Scanner;

**public** **class** Solution {

**static** **boolean** isAnagram(String a, String b) {

**char** a1[] = a.toLowerCase().toCharArray();

**char** b1[] = b.toLowerCase().toCharArray();

        java.util.Arrays.sort(a1);

        java.util.Arrays.sort(b1);

**return** java.util.Arrays.equals(a1,b1);

*// Complete the function*

    }

**public** **static** **void** main(String[] args) {

        Scanner scan = **new** Scanner(System.in);

        String a = scan.next();

        String b = scan.next();

        scan.close();

**boolean** ret = isAnagram(a, b);

        System.out.println( (ret) ? "Anagrams" : "Not Anagrams" );

    }

}

24-12-2020

**Java 1D Array**

77 more points to get your gold badge!

Rank: **137127**|Points: **173/250**

Java

**import** java.util.\*;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        Scanner scan = **new** Scanner(System.in);

**int** n = scan.nextInt();

**int** k = 0;

**int** a[] = **new** **int**[n];

**while**(n > k){

            a[k] = scan.nextInt();

            k++;

        }

        scan.close();

*// Prints each sequential element in array a*

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

            System.out.println(a[i]);

        }

    }

}

25-12-2020

**Java BigInteger**

**import** java.io.\*;

**import** java.util.\*;

**import** java.text.\*;

**import** java.math.\*;

**import** java.util.regex.\*;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        Scanner sc = **new** Scanner(System.in);

        BigInteger a = (sc.nextBigInteger());

        BigInteger b = (sc.nextBigInteger());

        System.out.println(a.add(b));

        System.out.println(a.multiply(b));

*/\* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named Solution. \*/*

    }

}

**26-12-2020**

**Java 2D Array**

**import** java.io.\*;

**import** java.math.\*;

**import** java.security.\*;

**import** java.text.\*;

**import** java.util.\*;

**import** java.util.concurrent.\*;

**import** java.util.regex.\*;

**public** **class** Solution {

**private** **static** **final** Scanner scanner = **new** Scanner(System.in);

**public** **static** **void** main(String[] args) {

**int**[][] arr = **new** **int**[6][6];

**int** maxSum = Integer.MIN\_VALUE;

**for** (**int** i = 0; i < 6; i++) {

            String[] arrRowItems = scanner.nextLine().split(" ");

            scanner.skip("(\r\n|[\n\r\u2028\u2029\u0085])?");

**for** (**int** j = 0; j < 6; j++) {

**int** arrItem = Integer.parseInt(arrRowItems[j]);

                arr[i][j] = arrItem;

**if** (i>1 && j>1)

                {

**int** sum = arr[i][j]

                             +arr[i][j-1]

                             +arr[i][j-2]

                             +arr[i-1][j-1]

                             +arr[i-2][j]

                             +arr[i-2][j-1]

                             +arr[i-2][j-2];

**if**(sum > maxSum){

                    maxSum = sum;

                }

                }

            }

        }

        System.out.println(maxSum);

    }

}

31-12-2020

**Java Method Overriding**

**import** java.util.\*;

**class** Sports{

    String getName(){

**return** "Generic Sports";

    }

**void** getNumberOfTeamMembers(){

        System.out.println( "Each team has n players in " + getName() );

    }

}

**class** Soccer **extends** Sports{

    @Override

    String getName(){

**return** "Soccer Class";

    }

**void** getNumberOfTeamMembers(){

        System.out.println( "Each team has 11 players in " + getName());

}

}

**public** **class** Solution{

**public** **static** **void** main(String []args){

        Sports c1 = **new** Sports();

        Soccer c2 = **new** Soccer();

        System.out.println(c1.getName());

        c1.getNumberOfTeamMembers();

        System.out.println(c2.getName());

        c2.getNumberOfTeamMembers();

    }

}

08-01-2021

**Java Inheritance II**

**import** java.io.\*;

**import** java.util.\*;

**import** java.text.\*;

**import** java.math.\*;

**import** java.util.regex.\*;

*//Write your code here*

**class** Arithmetic{

**public** **int** add(**int** x,**int** y){

**int** sum = x+y;

**return** sum;

    }

}

**class** Adder **extends** Arithmetic{

**public** **int** callAdd(**int** x,**int** y){

**return** add(x,y);

    }

}

**public** **class** Solution{

**public** **static** **void** main(String []args){

*// Create a new Adder object*

        Adder a = **new** Adder();

*// Print the name of the superclass on a new line*

        System.out.println("My superclass is: " + a.getClass().getSuperclass().getName());

*// Print the result of 3 calls to Adder's `add(int,int)` method as 3 space-separated integers:*

        System.out.print(a.add(10,32) + " " + a.add(10,3) + " " + a.add(10,10) + "\n");

     }

}

11-01-2021

**Java Arraylist**

**import** java.util.\*;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        Scanner in = **new** Scanner(System.in);

**int** n = in.nextInt();

        ArrayList<ArrayList<Integer>> rows = **new** ArrayList<>();

**for** (**int** i = 0; i < n; i++) {

**int** d = in.nextInt();

            ArrayList<Integer> row = **new** ArrayList<>();

**for** (**int** j = 0; j < d; j++) {

                row.add(in.nextInt());

            }

            rows.add(row);

        }

**int** q = in.nextInt();

**for** (**int** i = 0; i < q; i++) {

**int** x = in.nextInt();

**int** y = in.nextInt();

**try** {

                System.out.println(rows.get(x - 1).get(y - 1));

            } **catch** (IndexOutOfBoundsException e) {

                System.out.println("ERROR!");

            }

        }

    }

}

13-01-2021

**Java List**

**import** java.io.\*;

**import** java.util.\*;

**import** java.text.\*;

**import** java.math.\*;

**import** java.util.regex.\*;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        Scanner sc = **new** Scanner(System.in);

        List a = **new** ArrayList();

**int** n = sc.nextInt();

**for**(**int** i = 0;i<n;i++){

            a.add(sc.nextInt());

        }

**int** q = sc.nextInt();

**for**(**int** i = 0;i<q;i++){

            String s  = sc.next();

**if**(s.contains("Insert")){

**int** position = sc.nextInt();

**int** element = sc.nextInt();

                a.add(position,element);

            }**if**(s.contains("Delete")){

**int** position = sc.nextInt();

                a.remove(position);

            }

        }

**for**(**int** i=0;i<a.size();i++){

            System.out.print(a.get(i)+" ");

        }

*/\* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named Solution. \*/*

    }

}

13-01-2021

**Java Substring Comparisons**

import java.util.\*;

public class HelloWorld {

public static void main(String []args){

Scanner sc = new Scanner(System.in);

String s = "abhilashkalva";

int N = 3;

List a = new ArrayList();

int i,j=0;

for(i=3;i<=s.length();i++){

a.add(s.substring(j,i));

j++;

}

Collections.sort(a);

System.out.println(a.get(0) + "\n" + a.get(a.size()-1));

}

}

15-01-2021

**Java Iterator**

**import** java.util.\*;

**public** **class** Main{

**static** Iterator func(ArrayList mylist){

      Iterator it=mylist.iterator();

**while**(it.hasNext()){

         Object element = it.next();

**if**(element **instanceof** String)*//Hints: use instanceof operator*

**break**;

        }

**return** it;

   }

   @SuppressWarnings({ "unchecked" })

**public** **static** **void** main(String []args){

      ArrayList mylist = **new** ArrayList();

      Scanner sc = **new** Scanner(System.in);

**int** n = sc.nextInt();

**int** m = sc.nextInt();

**for**(**int** i = 0;i<n;i++){

         mylist.add(sc.nextInt());

      }

      mylist.add("###");

**for**(**int** i=0;i<m;i++){

         mylist.add(sc.next());

      }

      Iterator it=func(mylist);

**while**(it.hasNext()){

         Object element = it.next();

         System.out.println((String)element);

      }

   }

}

18-01-2021

**Java Map**

*//Complete this code or write your own from scratch*

**import** java.util.\*;

**import** java.io.\*;

**class** Solution{

**public** **static** **void** main(String []argh)

    {

        Scanner in = **new** Scanner(System.in);

**int** n=in.nextInt();

        in.nextLine();

*// Map<String, Integer> map = new HashMap<>(n);*

        HashMap<String,Integer> map=**new** HashMap<String,Integer>();

**for**(**int** i=0;i<n;i++)

        {

            String name=in.nextLine();

**int** phone=in.nextInt();

            in.nextLine();

            map.put(name, phone);

        }

**while**(in.hasNext())

        {

            String s=in.nextLine();

**if**(map.containsKey(s)){

                System.out.println(s + "=" +map.get(s));

            }**else**{

                System.out.println("Not found");

            }

        }

    }

}

20-01-2021

**Java Hashset**

**import** java.io.\*;

**import** java.util.\*;

**import** java.text.\*;

**import** java.math.\*;

**import** java.util.regex.\*;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        Scanner s = **new** Scanner(System.in);

**int** t = s.nextInt();

        String [] pair\_left = **new** String[t];

        String [] pair\_right = **new** String[t];

**for** (**int** i = 0; i < t; i++) {

            pair\_left[i] = s.next();

            pair\_right[i] = s.next();

        }

HashSet<String> pairs = **new** HashSet<String>(t);

**for**(**int** i = 0; i < t; i++)

    {

        pairs.add("(" + pair\_left[i] + ", " + pair\_right[i] + ")" );

        System.out.println(pairs.size());

    }

    }

}

21-01-2021

**Java BitSet**

**import** java.io.\*;

**import** java.util.\*;

**import** java.text.\*;

**import** java.math.\*;

**import** java.util.regex.\*;

**import** java.util.BitSet;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        Scanner sc = **new** Scanner(System.in);

**int** N = sc.nextInt();

**int** M = sc.nextInt();

        BitSet B1 = **new** BitSet(N);

        BitSet B2 = **new** BitSet(N);

        BitSet[] bitset = **new** BitSet[3];

        bitset[1] = B1;

        bitset[2] = B2;

**for**(**int** i = 0;i<M;i++){

            String operation = sc.next();

**int** s1 = sc.nextInt();

**int** s2 = sc.nextInt();

**if**(operation.equals("AND")){

                bitset[s1].and(bitset[s2]);

                System.out.println(B1.cardinality()+" "+B2.cardinality());

            }

**if**(operation.equals("SET")){

           bitset[s1].set(s2);

            System.out.println(B1.cardinality()+" "+B2.cardinality());

           }

**if**(operation.equals("FLIP")){

           bitset[s1].flip(s2);

            System.out.println(B1.cardinality()+" "+B2.cardinality());

        }

**if**(operation.equals("OR")){

           bitset[s1].or(bitset[s2]);

            System.out.println(B1.cardinality()+" "+B2.cardinality());

        }

**if**(operation.equals("XOR")){

           bitset[s1].xor(bitset[s2]);

            System.out.println(B1.cardinality()+" "+B2.cardinality());

        }

        }

*/\* Enter your code here. Read input from STDIN. Print output to STDOUT. Your class should be named Solution. \*/*

    }

}

**Java Strings Introduction**

**import** java.io.\*;

**import** java.util.\*;

**public** **class** Solution {

**public** **static** **void** main(String[] args) {

        Scanner sc=**new** Scanner(System.in);

        String A=sc.next();

        String B=sc.next();

        System.out.println(A.length()+B.length());

**if**(A.compareTo(B)>0){

            System.out.println("Yes");

        }**else**{

            System.out.println("No");

        }

        System.out.println(A.substring(0,1).toUpperCase()+A.substring(1)+" " + B.substring(0,1).toUpperCase()+B.substring(1));

*/\* Enter your code here. Print output to STDOUT. \*/*

    }

}

07-02-2021

**Java Anagrams**

**import** java.util.Scanner;

**public** **class** Solution {

**static** **boolean** isAnagram(String a, String b) {

**char** a1[] = a.toLowerCase().toCharArray();

**char** b1[] = b.toLowerCase().toCharArray();

        java.util.Arrays.sort(a1);

        java.util.Arrays.sort(b1);

**return** java.util.Arrays.equals(a1,b1);

*// Complete the function*

    }

**public** **static** **void** main(String[] args) {

        Scanner scan = **new** Scanner(System.in);

        String a = scan.next();

        String b = scan.next();

        scan.close();

**boolean** ret = isAnagram(a, b);

        System.out.println( (ret) ? "Anagrams" : "Not Anagrams" );

    }

}

02-03-2021

Hacke rank certification sample test

**import** java.io.\*;

**import** java.math.\*;

**import** java.security.\*;

**import** java.text.\*;

**import** java.util.\*;

**import** java.util.concurrent.\*;

**import** java.util.regex.\*;

**class** Result {

**public** **static** **void** fizzBuzz(**int** n) {

**for**(**int** i = 1;i<=n;i++){

**if**(i%3==0 && i%5==0){

                System.out.println("FizzBuzz");

            }**else** **if**(i%3==0 && i%5!=0){

                System.out.println("Fizz");

            }**else** **if**(i%3!=0 && i%5==0){

                System.out.println("Buzz");

            }**else**{

                System.out.println(i);

            }

        }

    }

}

**public** **class** Solution {

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

        BufferedReader bufferedReader = **new** BufferedReader(**new** InputStreamReader(System.in));

**int** n = Integer.parseInt(bufferedReader.readLine().trim());

        Result.fizzBuzz(n);

        bufferedReader.close();

    }

}