**loops,Conditions code download**

package coreJava;

public class whiledemo {

public static void main(String[] args) {  
// TODO Auto-generated method stub

//While loop  
  
//1 to 10   
int i=10;  
  
/\* while(i>0)  
{  
System.out.println(i);  
i--;//i=2  
}  
}\*/  
int j=20;  
do  
{  
System.out.println(j);  
j++;  
  
}while(j>30);// 1 loop of execution is guarantee

}  
  
//

}

// For if loop

package coreJava;

public class forloopexample {

public static void main(String[] args) {  
// TODO Auto-generated method stub

// 1 to 10  
  
/\* for(initization;condition;increment)  
{  
  
}\*/  
/\* if(5>2)  
{  
  
  
System.out.println("success");  
System.out.println("second step");  
}  
  
else  
  
System.out.println("fail");\*/  
  
  
for(int i=0;i<10;i=i+3)  
{  
if(i==9)  
System.out.println(" 9 is displayed");  
else  
System.out.println("I didnot find");//  
}  
}

}

**Nested loops code download**

package demopack;

public class pb1 {

public static void main(String[] args) {  
// TODO Auto-generated method stub  
//nested loops works -  
int k=1;  
for(int i=0;i<4;i++)  //(outer for loop) this block will loop for 4 times  
{  
//System.out.println( "outer loop started");  
for(int j=1;j<=4-i;j++) // inner loop  
{  
System.out.print( k);  
System.out.print("\t");  
k++;  
}  
//System.out.println( "");  
}  
}

}

// Example on pyramid Triangle

package demopack;

public class loop2demo {

public static void main(String[] args) {  
// TODO Auto-generated method stub  
//int k=1;  
for(int i=1;i<5;i++)  
{  
for(int j=1;j<=i;j++)  
{  
System.out.print(j);  
System.out.print("\t");  
//k++;  
}  
System.out.println("");  
  
}  
}

}

**Arrays code download**

package coreJava;

//Arrays

public class ArraysDemo  {

public static void main(String[] args) {  
// TODO Auto-generated method stub

arrayListexample ab=new arrayListexample();  
ab.abc();  
ab.abc();  
//ab.  
  
  
/\* int a;  
a=4;\*/  
  
//- A container which stores multiple values of same data type  
  
int a[] = new int[5];// Delcares an aray and allocates memory for the values  
a[0]= 2;  
a[1]=6;  
a[2]=1;  
a[3]=9;  
a[4]=12;//initilased values into that array  
  
int b[] = {1,4,3,5,7,8};  
  
for(int i=0;i<b.length;i++)  
{  
System.out.println(b[i]);  
  // retrieve values present in this array/  
}  
  
}

}

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

//Multi Dimensional code

package coreJava;

public class Multidimensional {

public static void main(String[] args) {  
// TODO Auto-generated method stub  
////a[row][coloum]  
  
  
int a[][] = new int[2][3];  
a[0][0]=2;  
a[0][1]=4;  
a[0][2]=5;  
a[1][0]=3;  
a[1][1]=4;  
a[1][2]=7;  
//System.out.println(a[1][0]);  
/\*int b[][]= {{2,4,5},{3,4,7},{5,2,1}};  
System.out.println(b[2][1]);\*/  
  
for(int i=0;i<2;i++)  //row  
{  
  
for(int j=0;j<3;j++)   //coloumn  
{  
  
System.out.println(a[i][j]);  
}  
}  
  
}

}

**programming code download**

package coreJava;

public class InterviewMinnumber {  
/\*2  4  5

3  4  7

1  2  9\*/  
//Maximum number from the array

public static void main(String[] args) {  
// TODO Auto-generated method stub

int abc[][]={{2,4,5},{3,2,10},{1,2,0}};  
int min=abc[0][0];  
int mincoloumn = 0;  
  
  
for(int i=0;i<3;i++)  
{  
for(int j=0;j<3;j++)  
{  
if(abc[i][j]<min)//2  
{  
min=abc[i][j];  
mincoloumn=j;  
}  
}  
}  
//=1  
int max=abc[0][mincoloumn];  
int k = 0;  
while(k<3)  
{  
if(abc[k][mincoloumn]>max)  
{  
max=abc[k][mincoloumn];  
}  
k++;  
}  
  
System.out.println(max);  
}

}

**Sorting and swapping code download**

package demopack;

public class sortarraydemo {

public static void main(String[] args) {  
// TODO Auto-generated method stub  
     int a[]= {2,6,1,4,9};  
     int temp;  
       
// 1,2,3,4,6, 9  
       
     for(int i=0;i<5;i++)  
     {  
    for(int j=i+1;j<5;j++)  
    {  
    if(a[i] > a[j])  
    {  
    temp=a[i];  
    a[i]=a[j];  
    a[j]=temp;  
     
    }  
    }  
     }  
for(int i=0;i<5;i++)  
{  
System.out.println(a[i]);  
}  
  
  
  
/\* int a= 5;  
int b =4;  
/\*int temp;  
temp=a;  
a=b;  
b=temp;  
System.out.println(a);  
System.out.println(b);  
// Swap with out variable  
  
a=a+b;  // a= 9  
b=a-b;  //b = 5  
a=a-b; // a= 4  \*/  
  
  
  
      

}

}

**String code download**

package coreJavaTraining;

public class secondclass {  
public void setData()  
{  
System.out.println(" I am in second class method");  
}

package coreJavaTraining;

public class stringclassdemo {

public static void main(String[] args) {  
// TODO Auto-generated method stub

//String : it is one of the prebuilt class in java  
/\* 1.String literal  
2.by creating object of string\*/  
  
String a= " javatraining";//string   
  
System.out.println(a.charAt(2));  
System.out.println(a.indexOf("e"));  
System.out.println(a.substring(3, 6));  
System.out.println(a.substring(5));  
System.out.println(a.concat("rahul teaches"));  
//a.length()  
System.out.println(a.trim());  
a.toUpperCase();  
a.toLowerCase();  
//split  
String arr[]=a.split("t");  
System.out.println(arr[0]);  
System.out.println(arr[1]);  
System.out.println(a.replace("t", "s"));

}

}

**Interface code download**

package coreJava;

import demopack.CentralTraffic;

public class AustralianTrafic implements CentralTraffic,ContinentalTraffic {

public static void main(String[] args) {  
// TODO Auto-generated method stub  
CentralTraffic a= new AustralianTrafic();  
a.redStop();  
a.FlashYellow();  
a.greenGo();  
  
AustralianTrafic at=new AustralianTrafic();  
ContinentalTraffic ct=new AustralianTrafic();  
at.walkonsymbol();  
ct.Trainsymbol();  
  
  
}

@Override  
public void redStop() {  
// TODO Auto-generated method stub  
System.out.println(" redstop implementation");  
}  
public void walkonsymbol()  
{  
System.out.println("walking");  
}  
@Override  
public void FlashYellow() {  
// TODO Auto-generated method stub  
System.out.println(" flash yellow implementation");  
//code  
}

@Override  
public void greenGo() {  
// TODO Auto-generated method stub  
System.out.println(" Green go implementation");  
}

@Override  
public void Trainsymbol() {  
// TODO Auto-generated method stub  
  
}

}

//CentralTraffic

package demopack;

public interface CentralTraffic {  
int a=4;//public   
public void greenGo();  
public void redStop();  
public void FlashYellow();

}

//ContinentalTraffic

package coreJava;

public interface ContinentalTraffic {

public void Trainsymbol();  
}

**Date code download**

package coreJava;

import java.text.SimpleDateFormat;  
import java.util.Date;

public class dateDemo {

public static void main(String[] args) {  
// TODO Auto-generated method stub  
//current date..current time./  
Date d= new Date();  
  
SimpleDateFormat sdf=new SimpleDateFormat("M/d/yyyy");  
SimpleDateFormat sd=new SimpleDateFormat("M/d/yyyy hh:mm:ss");  
System.out.println(sdf.format(d));  
System.out.println(sd.format(d));  
System.out.println(d.toString());  
  
  
  
  
}

}

**Constructor demo code**

package coreJava;

public class constructDemo {  
// Default  
public constructDemo()  
{  
System.out.println(" I am in the constructor");  
System.out.println(" I am in the constructor lecture 1");  
  
//  
}  
// Parameterized constructor  
  
public constructDemo(int a, int b)  
{  
System.out.println(" I am in the parameterized constructor");  
int c=a+b;  
System.out.println(c);  
  
}  
public constructDemo(String str)  
{  
System.out.println(str);  
  
}  
public void getdata()  
{  
  
System.out.println("I am the method");  
}  
  
//will not return values  
//name of constructor should be the class name

public static void main(String[] args) {  
// TODO Auto-generated method stub  
constructDemo cd= new constructDemo();  
constructDemo cds= new constructDemo("hello");  
constructDemo c= new constructDemo(4,5);  
  
// compiler will call implict constructor if you have not defined constructor block  
//when ever you create an object constructor is called  
//block of code when ever an object is created  
}

}

**code download**

//this keyword demo

package coreJava;

public class thisDemo {  
  
int a= 2;  
  
 public void getData()  
 {  
int a= 3;  
int b=a+this.a;  
System.out.println(a);  
System.out.println(this.a);  
System.out.println(b);  
  
  
// this refers to curent object- object scope lies in class level  
}  
//  
  
  
public static void main(String[] args) {  
// TODO Auto-generated method stub

thisDemo td=new thisDemo();  
td.getData();  
}

}

**Exception code download**

package coreJava;  
//one try can be followed by mutiplle catch blocks  
//catch should be an immediate block after try  
//  
public class exceptionDemo {  
  
public static void main(String[] args) {  
int b=7;  
int c=0;  
  
try  
{  
//  purchased faile  
    int k=b/c;//  
//int arr[]=new int[5];  
  
       
        //System.out.println(arr[7]);  
         
}  
  
catch(ArithmeticException et)  
{  
System.out.println("I catched the Arthimetic/exception");  
}  
  
catch(IndexOutOfBoundsException ets)  
{  
System.out.println("I catched the IndexBound/exception");  
}  
catch(Exception e)  
{  
//  retry again  
System.out.println("I catched the error/exception");  
}  
finally  
{  
System.out.println("delete cookies");//THis block is executed irrespective of exception thrown or not  
}  
  
// TODO Auto-generated method stub

}

}

**Array List Code download**

package coreJava;

import java.util.ArrayList;

public class arrayListexample {  
// can accept duplicate values  
//ArraList,LinkedList,vector- Implementing List interface  
//array have fixed size where as arraylist can grow dynamicaly  
//you can access and insert any value in any index  
  
private int i =5;  
  
public static void main(String[] args) {  
// TODO Auto-generated method stub

ArrayList<String> a=new ArrayList<String>();  
a.add("rahul");  
a.add("java");  
a.add("java");  
System.out.println(a);  
a.add(0, "student");  
System.out.println(a);  
/\*a.remove(1);  
a.remove("java");  
System.out.println(a);\*/  
System.out.println(a.get(2));  
// testing  
System.out.println(a.contains("java"));  
System.out.println(a.indexOf("rahul"));  
System.out.println(a.isEmpty());  
System.out.println(a.size());  
  
  
  
  
}  
  
protected void abc() {  
// TODO Auto-generated method stub  
System.out.println("hello");  
}

}

**Code explaining hashset and hashmap**

package coreJava;

import java.util.HashMap;  
import java.util.Iterator;  
import java.util.Map;  
import java.util.Map.Entry;  
import java.util.Set;

public class hashMapexample {

public static void main(String[] args) {  
// TODO Auto-generated method stub

HashMap<Integer,String> hm=new HashMap<Integer,String>();  
hm.put(0, "hello");  
hm.put(1, "Gudbye");  
hm.put(42, "morning");  
hm.put(3, "evening");  
  
  
System.out.println(hm.get(42));  
hm.remove(42);  
System.out.println(hm.get(42));  
Set sn= hm.entrySet();  
Iterator it =sn.iterator();  
//hashtable -pass table set collections   
while(it.hasNext())  
{  
System.out.println(it.next());  
Map.Entry mp=(Map.Entry)it.next();//  
System.out.println(mp.getKey());  
System.out.println(mp.getValue());  
  
  
}

}}

// HashSet

package coreJava;

import java.util.HashSet;  
import java.util.Iterator;

public class hashSetexample {

public static void main(String[] args) {  
// TODO Auto-generated method stub

//HashSet treeset, LinkedHashset implements Set interface  
//does not accept duplicate values   
// There is no guarantee elements stored in sequential order..Random order  
  
HashSet<String> hs= new HashSet<String>();  
hs.add("USA");  
hs.add("UK");  
hs.add("INDIA");  
hs.add("he");  
hs.add("she");  
  
  
hs.add("INDIA");  
System.out.println(hs);  
//System.out.println(hs.remove("UK"));  
System.out.println(hs.isEmpty());  
System.out.println(hs.size());  
  
Iterator<String> i=hs.iterator();  
while(i.hasNext())  
{  
System.out.println(i.next());  
}  
  
  
  
  
}

}

Unique Element:

package demopack;

import java.util.ArrayList;

public class collectiondemo {

public static void main(String[] args) {  
// TODO Auto-generated method stub

int a[] ={ 4,5,5,5,4,6,6,9,4};  
// Print unique number from the list- Amazon   
//print the string in reverse  
  
ArrayList<Integer>ab =new ArrayList<Integer>();  
for(int i=0;i<a.length;i++)  
{  
int k=0;  
  
if(!ab.contains(a[i]))  
{  
ab.add(a[i]);  
k++;  
  
for(int j=i+1;j<a.length;j++)  
{  
if(a[i]==a[j])  
{  
k++;  
}  
  
}  
// System.out.println(a[i]);  
//System.out.println(k);  
if(k==1)  
System.out.println(a[i]+"is unique number");  
}  
  
}  
  
  
  
}

}