**JAVA**

1. ABC

package com.ust.Test\_Main;

public class ABC {

public void disp()

{

System.out.println("disp() method of parent class");

}

}

class Demo extends ABC{

//Overriding method

public void disp(){

System.out.println("disp() method of Child class");

}

public void newMethod(){

System.out.println("new method of child class");

}

public static void main( String args[]) {

/\* When Parent class reference refers to the parent class object

\* then in this case overridden method (the method of parent class)

\* is called.

\*/

ABC obj = new ABC();

obj.disp();

ABC obj2 = new Demo();

obj2.disp();

}

}

2 AbstractExample1

package com.ust.test;

public abstract class AbstractExample1 {

private String name;

private int paymentPerHour;

public AbstractExample1(String name,int paymentPerHour) {

this.name=name;

this.paymentPerHour=paymentPerHour;

}

public abstract int caluculateSalary();

public String getName() {

return name;

}

public void setName(String name) {

this.name=name;

}

public int getPaymentPerHour() {

return paymentPerHour;

}

public void setPaymentPerHour(int paymentPerHour) {

this.paymentPerHour=paymentPerHour;

}

}

3 Abstract class Base

package com.ust.test;

abstract class Base{

abstract void fun();

}

class Derived extends Base{

void fun()

{

System.out.println("Derived fun() called");

}

}

public class AbstractionExample3 {

public static void main(String[] args) {

Base b=new Derived();

b.fun();

// TODO Auto-generated method stub

}

}

4 Abstract Base class

package com.ust.test;

abstract class Base\_{

abstract void func();

}

class Derived123 extends Base\_{

void func() {

System.out.println("Derived class is called");

}

}

public class AbstractionExample4 {

public static void main(String[] args) {

Base\_ b = new Derived123();

b.func();

}

}

5 AbstractionTest

package com.ust.test;

abstract class Shape {

String color;

abstract double area();

public abstract String toString();

public Shape(String color) {

System.out.println("Shape constructor called");

this.color=color;

}

public String getColor() {

return color;

}

}

class Circle extends Shape{

double radius;

public Circle(String color, double radius) {

super(color);

System.out.println("Circular constructor is called");

this.radius=radius;

}

double area() {

return Math.PI\*Math.pow(radius,2);

}

public String toString() {

return "Circle color is" +super.color + "and area is:" + area();

}

}

class Rectangle extends Shape{

double length;

double width;

public Rectangle(String color, double length, double width) {

super(color);

System.out.println("Rectangle constructor is called");

this.length=length;

this.width=width;

}

double area() {

return length\*width;

}

public String toString() {

return "Rectangle color is "+ super.color + " and area is :"+ area();

}

}

public class AbstractionTest{

public static void main(String[] args) {

Shape s1=new Circle("Red", 2.2);

Shape s2=new Rectangle("Yellow",2,4);

System.out.println(s1.toString());

System.out.println(s2.toString());

}

}

6 AccessModPrivateString

package com.ust.test;

class Data\_{

private String name;

public String getName() {

return this.name;

}

public void setName(String name) {

this.name=name;

}

}

public class AccessModPrivateString {

public static void main(String[] args) {

Data\_ d=new Data\_();

d.setName("abc");

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

}

}

// TODO Auto-generated method stub

7 AccessModPrivateVar

package com.ust.test;

class Data{

public String name;

}

public class AccessModPrivateVar {

public static void main(String[] args) {

Data d=new Data();

d.name="abc";

}

}

8 AccessModProtectedExample

package com.ust.test;

public class AccessModProtectedExample {

protected void display() {

System.out.println("I am an animal");

}

}

class Dog extends AccessModProtectedExample{

public static void main(String[] args) {

Dog dog=new Dog();

dog.display();

}

}

9 AccessModPublicExample

package com.ust.test;

class Animal123{

public int legCount;

public void display() {

System.out.println("I am an animal");

System.out.println("I have "+ legCount +" legs.");

}

}

public class AccessModPublicExample {

public static void main(String[] args) {

Animal123 a=new Animal123();

a.legCount=5;

a.display();

}

}

10 AddSumDoWhile

package com.ust.test;

import java.util.Scanner;

public class AddSumDoWhile {

public static void main(String[] args) {

int sum=0;

int number=0;

Scanner input=new Scanner(System.in);

do {

System.out.println("Enter a number");

number=input.nextInt();

sum=sum+number;

}while(number>=0);

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

input.close();

}

}

11 AddSumNumbers

package com.ust.test;

import java.util.Scanner;

public class AddSumNumbers {

public static void main(String[] args) {

int sum=0;

Scanner i=new Scanner(System.in);

//Taking input

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

int number=i.nextInt();

while(number>=0) {

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

number=i.nextInt();

sum=sum+number;

}

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

i.close();

}

}

12 ArrayAverage

package com.ust.test;

public class ArrayAverage {

public static void main(String[] args) {

int[] numbers= {1,2,3,5,9,8,7,8};

int sum=0;

double average;

for(int number: numbers) {

sum=sum+number;

}

int arrayLength=numbers.length;

average=((double)sum/(double)arrayLength);

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

System.out.println("Average =" +" "+ average);

}

}

13 ArrayExample

package com.ust.test;

public class ArrayExample {

public static void main(String[] args) {

int[] numbers= {1,2,-1,-2};

for(int number: numbers) {

System.out.println(number);;

}

}

}

14 ArrayForExample package com.ust.test;

public class ArrayForExample {

public static void main(String[] args) {

int[] age= {1,15,16};

System.out.println("Usage of for loop");

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

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

}

}

}

15 ArrayLatForExample

package com.ust.test;

public class ArrayLatForExample {

public static void main(String[] args) {

int[] age= {1,15,16};

System.out.println("Usage of for loop");

for(int a: age) {

System.out.println(a);

}

}

}

16 Class

package com.ust.Test\_Main;

public class Class {

public static void main(String[] args) {

// TODO Auto-generated method stub

}

}

17 CollectionIteratorExample5

JAVA

1. ABC

package com.ust.Test\_Main;

public class ABC {

public void disp()

{

System.out.println("disp() method of parent class");

}

}

class Demo extends ABC{

//Overriding method

public void disp(){

System.out.println("disp() method of Child class");

}

public void newMethod(){

System.out.println("new method of child class");

}

public static void main( String args[]) {

/\* When Parent class reference refers to the parent class object

\* then in this case overridden method (the method of parent class)

\* is called.

\*/

ABC obj = new ABC();

obj.disp();

ABC obj2 = new Demo();

obj2.disp();

}

}

2 AbstractExample1

package com.ust.test;

public abstract class AbstractExample1 {

private String name;

private int paymentPerHour;

public AbstractExample1(String name,int paymentPerHour) {

this.name=name;

this.paymentPerHour=paymentPerHour;

}

public abstract int caluculateSalary();

public String getName() {

return name;

}

public void setName(String name) {

this.name=name;

}

public int getPaymentPerHour() {

return paymentPerHour;

}

public void setPaymentPerHour(int paymentPerHour) {

this.paymentPerHour=paymentPerHour;

}

}

3 Abstract class Base

package com.ust.test;

abstract class Base{

abstract void fun();

}

class Derived extends Base{

void fun()

{

System.out.println("Derived fun() called");

}

}

public class AbstractionExample3 {

public static void main(String[] args) {

Base b=new Derived();

b.fun();

// TODO Auto-generated method stub

}

}

4 Abstract Base class

package com.ust.test;

abstract class Base\_{

abstract void func();

}

class Derived123 extends Base\_{

void func() {

System.out.println("Derived class is called");

}

}

public class AbstractionExample4 {

public static void main(String[] args) {

Base\_ b = new Derived123();

b.func();

}

}

5 AbstractionTest

package com.ust.test;

abstract class Shape {

String color;

abstract double area();

public abstract String toString();

public Shape(String color) {

System.out.println("Shape constructor called");

this.color=color;

}

public String getColor() {

return color;

}

}

class Circle extends Shape{

double radius;

public Circle(String color, double radius) {

super(color);

System.out.println("Circular constructor is called");

this.radius=radius;

}

double area() {

return Math.PI\*Math.pow(radius,2);

}

public String toString() {

return "Circle color is" +super.color + "and area is:" + area();

}

}

class Rectangle extends Shape{

double length;

double width;

public Rectangle(String color, double length, double width) {

super(color);

System.out.println("Rectangle constructor is called");

this.length=length;

this.width=width;

}

double area() {

return length\*width;

}

public String toString() {

return "Rectangle color is "+ super.color + " and area is :"+ area();

}

}

public class AbstractionTest{

public static void main(String[] args) {

Shape s1=new Circle("Red", 2.2);

Shape s2=new Rectangle("Yellow",2,4);

System.out.println(s1.toString());

System.out.println(s2.toString());

}

}

6 AccessModPrivateString

package com.ust.test;

class Data\_{

private String name;

public String getName() {

return this.name;

}

public void setName(String name) {

this.name=name;

}

}

public class AccessModPrivateString {

public static void main(String[] args) {

Data\_ d=new Data\_();

d.setName("abc");

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

}

}

// TODO Auto-generated method stub

7 AccessModPrivateVar

package com.ust.test;

class Data{

public String name;

}

public class AccessModPrivateVar {

public static void main(String[] args) {

Data d=new Data();

d.name="abc";

}

}

8 AccessModProtectedExample

package com.ust.test;

public class AccessModProtectedExample {

protected void display() {

System.out.println("I am an animal");

}

}

class Dog extends AccessModProtectedExample{

public static void main(String[] args) {

Dog dog=new Dog();

dog.display();

}

}

9 AccessModPublicExample

package com.ust.test;

class Animal123{

public int legCount;

public void display() {

System.out.println("I am an animal");

System.out.println("I have "+ legCount +" legs.");

}

}

public class AccessModPublicExample {

public static void main(String[] args) {

Animal123 a=new Animal123();

a.legCount=5;

a.display();

}

}

10 AddSumDoWhile

package com.ust.test;

import java.util.Scanner;

public class AddSumDoWhile {

public static void main(String[] args) {

int sum=0;

int number=0;

Scanner input=new Scanner(System.in);

do {

System.out.println("Enter a number");

number=input.nextInt();

sum=sum+number;

}while(number>=0);

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

input.close();

}

}

11 AddSumNumbers

package com.ust.test;

import java.util.Scanner;

public class AddSumNumbers {

public static void main(String[] args) {

int sum=0;

Scanner i=new Scanner(System.in);

//Taking input

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

int number=i.nextInt();

while(number>=0) {

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

number=i.nextInt();

sum=sum+number;

}

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

i.close();

}

}

12 ArrayAverage

package com.ust.test;

public class ArrayAverage {

public static void main(String[] args) {

int[] numbers= {1,2,3,5,9,8,7,8};

int sum=0;

double average;

for(int number: numbers) {

sum=sum+number;

}

int arrayLength=numbers.length;

average=((double)sum/(double)arrayLength);

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

System.out.println("Average =" +" "+ average);

}

}

13 ArrayExample

package com.ust.test;

public class ArrayExample {

public static void main(String[] args) {

int[] numbers= {1,2,-1,-2};

for(int number: numbers) {

System.out.println(number);;

}

}

}

14 ArrayForExample package com.ust.test;

public class ArrayForExample {

public static void main(String[] args) {

int[] age= {1,15,16};

System.out.println("Usage of for loop");

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

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

}

}

}

15 ArrayLatForExample

package com.ust.test;

public class ArrayLatForExample {

public static void main(String[] args) {

int[] age= {1,15,16};

System.out.println("Usage of for loop");

for(int a: age) {

System.out.println(a);

}

}

}

16 Class

package com.ust.Test\_Main;

public class Class {

public static void main(String[] args) {

// TODO Auto-generated method stub

}

}

17 CollectionIteratorExample5

package com.ust.test;

import java.util.ArrayList;

import java.util.Iterator;

public class CollectionIteratorExample5 {

public static void main(String[] args) {

ArrayList<Integer> numbers=new ArrayList<Integer>();

numbers.add(10);

numbers.add(120);

numbers.add(130);

numbers.add(103);

Iterator<Integer> it = numbers.iterator();

while(it.hasNext()) {

Integer i =it.next();

if(i<10) {

it.remove();

}

}

System.out.println(numbers);

}

}

18 CollectionsExample1

package com.ust.test;

import java.util.ArrayList;

public class CollectionsExample1 {

public static void main(String[] args) {

ArrayList<String> cars = new ArrayList<String>();//We created new arraylist and restricted it to string data types

cars.add("Volvo");

cars.add("olo");

cars.add("benz");

cars.add("rolls");

cars.add("TATA");

//We are using enhanced for loop to fetch and print all the

for(String i:cars) {

System.out.println(i);

}

// This is a collection where are using ArrayList method by restricting it into string type

}

}

19 CollectionsExample2

package com.ust.test;

import java.util.ArrayList;

public class CollectionsExample2 {

public static void main(String[] args) {

//

ArrayList<Integer> cars = new ArrayList<Integer>();//We created new arraylist and restricted it to string data types

cars.add(10);

cars.add(101);

cars.add(101);

cars.add(110);

cars.add(110);

//We are using enhanced for loop to fetch and print all the

for(Integer i:cars) {

System.out.println(i);

}

}

}

20 CollectionsHashExample3

package com.ust.test;

import java.util.HashMap;

public class CollectionsHashExample3 {

public static void main(String[] args) {

HashMap<String, Integer> people=new HashMap<String, Integer>();

people.put("John", 32);

people.put("Peter", 52);

people.put("rocky", 39);

for(String i:people.keySet()) {

System.out.println("Key: "+ i +" Value:" + people.get(i));

}

// We use Hashmap and we are fetching and priting values from it

}

}

21 CollectionsHashSetExample4

package com.ust.test;

import java.util.HashSet;

public class CollectionsHashSetExample4 {

public static void main(String[] args) {

HashSet<Integer>numbers=new HashSet<Integer>();

numbers.add(4);

numbers.add(44);

numbers.add(444);

for(int i:numbers) {

if(numbers.contains(i)) {

System.out.println(i + " Was found in the set");

}else {

System.out.println(i+" was not found in the set");

}

}

// TODO Auto-generated method stub

}

}

22 ConstructorOverloadingExamples

package com.ust.test;

public class ConstructorOverloadingExamples {

String language;

ConstructorOverloadingExamples(){

this.language="java";

}

ConstructorOverloadingExamples(String language){

this.language=language;

}

public void getName() {

System.out.println("programming language:" + this.language);

}

public static void main(String[] args) {

ConstructorOverloadingExamples obj1=new ConstructorOverloadingExamples();

ConstructorOverloadingExamples obj2=new ConstructorOverloadingExamples("Python");

obj1.getName();

obj2.getName();

}

}

23 ContinueExample

package com.ust.test;

public class ContinueExample {

public static void main(String[] args) {

for(int i=1;i<=10;++i) {

if(i>4 && i<9) {

continue;

}

System.out.println(i);

}

}

}

24 DefaultConstructor

package com.ust.test;

public class DefaultConstructor {

int a;

boolean b;

public static void main(String[] args) {

DefaultConstructor ob=new DefaultConstructor();

System.out.println("Deafault value:");

System.out.println("a="+ob.a);

System.out.println("b="+ob.b);

}

}

25 DoWhileExample

package com.ust.test;

public class DoWhileExample {

public static void main(String[] args) {

float i=0;

do{

System.out.println(i);

i++;

}

while(i<5);

}

}

26 EvenOdd

package com.ust.test;

public class EvenOdd {

public static void main(String[] args) {

int n=13;

if(n%2==0) {

System.out.println("It is even number");

}

else {

System.out.println("Is is odd number");

}

// TODO Auto-generated method stub

}

}

27 Example

package com.ust.test;

public class Example {

int age;

String name;

float salary;

public void display() {

System.out.println("Hello world");

}

public static void main(String args[]) {

Example ex=new Example();

ex.display();

}

}

28 Exception1

package com.ust.test;

public class Exception1 {

public static void main(String[] args) {

String str="abc";

String str1=null;

try {

System.out.println(str1.length());

}

catch(Exception ex) {

ex.printStackTrace();

}

}

}

29 Exception2

package com.ust.test;

public class Exception2 {

public static void main(String[] args) {

int a=0, b=10;

int c=b/a;

System.out.println(c);

try {

c=b/a;

System.out.println(c);

}

catch(ArithmeticException e) {

e.printStackTrace();

}

}

}

30 Exception3

package com.ust.test;

public class Exception3 {

public static void main(String[] args) {

try {

int divideByZero=5/0;

}

catch(ArithmeticException e) {

System.out.println("ArthimeticException => " +e.getMessage() );

}

finally {

System.out.println("This is the final block");

}

}

}

31 Exception4

package com.ust.test;

import java.io.\*;

public class Exception4 {

public static void findFile() throws IOException{

File newFile=new File("test.txt");

FileInputStream stream=new FileInputStream(newFile);

}

public static void main(String[] args) {

try {

findFile();

}catch(IOException e){

System.out.println(e);

}

finally {

System.out.println("There is file a not found exception");

}

}

}

32 Exception5

package com.ust.test;

public class Exception5 {

public static void main(String[] args) {

try {

String a = "this is like chipping";

char c = a.charAt(24);

}catch(StringIndexOutOfBoundsException e){

System.out.println("StringIndexOutOfBoundsException");

}

}

}

33 Exception6

package com.ust.test;

public class Exception6 {

public static void main(String[] args) {

try {

int num=Integer.parseInt("aka");

System.out.println(num);

}catch(NumberFormatException e) {

System.out.println("NumberFormatException");

}

}

}

34 Exception7

package com.ust.test;

class Exception7 extends Exception {

private static int accno[] = {1001,1002,1003,1004};

private static String name[]= {"nish","subh","abhi","akash"};

private static double bal[]= {10000.0,15550.0,20000.0,30000.0};

Exception7(){

}

Exception7(String str){super(str);}

public static void main(String[] args) {

try {

System.out.println("Account no: " + "/t" + "Customer name: "+"/t" + "balance");

for(int i=0;i<5;i++) {

System.out.println(accno[i] + "/t" +name[i] + "/t" +bal[i]);

if(bal[i]<1000) {

Exception7 me = new Exception7("Balance is less than 100");

throw me;

}

}

}catch(Exception7 e) {

e.printStackTrace();

}

}

}

35 Exception8

package com.ust.test;

public class Exception8 {

static void checkAge(int age) {

if(age<18) {

throw new ArithmeticException("Access Denied");

}

else {

System.out.println("Access granted");

}

}

public static void main(String[] args) {

checkAge(7);

}

}

36 FileHandling1

package com.ust.test;

import java.io.\*;

class FileHandling1 {

public static void main(String[] args) {

try {

BufferedWriter b=new BufferedWriter(new FileWriter("D:\\test.txt"));

b.write("hello" + "\n" + "karlos" + "\n");

b.write("hello\n");

b.write("hello\n");

b.close();

System.out.println("file created");

}catch(Exception ex) {

return;

}

}

}

37 FileHandling2

package com.ust.test;

import java.io.\*;

public class FileHandling2 {

public static void main(String[] args) {

// TODO Auto-generated method stub

File f=new File("D:\\test2.txt");

try {

boolean value = f.createNewFile();

if(value) {

System.out.println("The new file is created");

}

else {

System.out.println("The file already exists");

}

}

catch(Exception e) {

e.getStackTrace();

}

}

}

38 FileHandling3

package com.ust.test;

import java.io.\*;

public class FileHandling3 {

public static void main(String[] args) {

char[] array = new char[100];

try {

FileReader i=new FileReader("D:\\test2.txt");

i.read(array);

System.out.println("Data in the file:");

System.out.println(array);

i.close();

// TODO Auto-generated method stub

}catch(Exception e){

e.getStackTrace();

}

}

}