JAVA QUESTION

Question 1……

public class Question1

{

public static void main(String[] args)

{

String name="kavindu piumal";

System.out.println("My name is "+name);

}

}

Question 2….

import java.util.Scanner;

public class Question2

{

public static void main(String[] args)

{

int n1,n2,n3,calculate;

Scanner c1=new Scanner(System.in);

System.out.println("Enter the first number:");

n1=c1.nextInt();

System.out.println("Second the first number:");

n2=c1.nextInt();

System.out.println("Third the first number:");

n3=c1.nextInt();

calculate=n1+n2+n3;

System.out.println("Answer is "+calculate);

}

}

Question 3….

import java.util.Scanner;

public class Question3

{

public static void main(String[] args)

{

float Celsius,Fahrenheit;

Scanner s1=new Scanner(System.in);

System.out.println("Enter the Fahrenheit value:");

Fahrenheit=s1.nextFloat();

//formula

Celsius=(5/9)\*(Fahrenheit-32);

System.out.println("Celsius value is "+Celsius);

}

}

Question 4…..

package com.mycompany.question4;

import java.util.Scanner;

public class Question4

{

public static void main(String[] args)

{

int n1,n2,n3,sum;

float average;

Scanner s1=new Scanner(System.in);

System.out.println("Enter the n1 number:");

n1=s1.nextInt();

System.out.println("Enter the n2 number:");

n2=s1.nextInt();

System.out.println("Enter the n3 number:");

n3=s1.nextInt();

sum=n1+n2+n3;

System.out.println("Sum is "+sum);

average=sum/3;

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

int max;

max=n1;

if(n2>max)

{

max=n2;

}

if(n3>max)

{

max=n3;

}

System.out.println("Largest number is "+max);

int mini;

mini=n1;

if(n2<mini)

{

mini=n2;

}

if(n3>mini)

{

mini=n3;

}

System.out.println("Smallest number is "+mini);

}

}

Question 5…

Question 6…

//main method

package com.mycompany.question6

public class Question6

{

public static void main(String[] args)

{

Date d1=new Date(04,25,2002);

d1.display();

//set method

d1.setdate(13);

d1.setmonth(04);

d1.setyear(2002);

d1.display();

//get method

d1.getdate();

d1.getmonth();

d1.getyear();

}

}

//Date class

package com.mycompany.question6

public class Date

{

//data

private int month,date,year;

//method

public Date(int month,int date,int year)

{

this.date=date;

this.month=month;

this.year=year;

}

public void display()

{

System.out.println("data is "+month+"/ "+date+"/"+year);

}

//getter and setter method

public int getdate()

{

return date;

}

public void setdate(int date)

{

this.date=date;

}

public int getmonth()

{

return month;

}

public void setmonth(int month)

{

this.month=month;

}

public int getyear()

{

return year;

}

public void setyear(int year)

{

this.year=year;

}

}

Question 7..

//main method

package com.mycompany.itemobj;

public class Itemobj

{

public static void main(String[] args)

{

//Item class

Item i1=new Item(12,"This is good product");

i1.description="This is good product";

i1.location=12;

i1.getdescription();

System.out.println(i1.getdescription());

i1.getlocation();

System.out.println(i1.getlocation());

i1.setdescription("This is good product");

i1.setlocation(12);

i1.display();

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

//Monster class

Monster m1=new Monster(34,"good product");

m1.location=34;

m1.description="good product";

m1.getdescription();

System.out.println(m1.getdescription());

m1.getlocation();

System.out.println(m1.getlocation());

m1.setdescription("good product");

m1.setlocation(34);

m1.display();

}

}

//item class

package com.mycompany.itemobj;

public class Item

{

//data

protected int location;

protected String description;

//methods

//parameterized constructor method

public Item(int location,String description)

{

this.location=location;

this.description=description;

}

//gettter ang setter methods

public int getlocation()

{

return location;

}

public void setlocation(int location)

{

this.location=location;

}

public String getdescription()

{

return description;

}

public void setdescription(String description)

{

this.description=description;

}

public void display()

{

System.out.println("Location is "+location);

System.out.println("Description is "+description);

}

}

//Monster class

public class Monster extends Item

{

public Monster(int location, String description)

{

super(location, description);

}

}

Question 8…

package com.mycompany.savingsaccountobj;

public class SavingsAccount

{

//data

private static double annualInterestRate=0.04;

private double savingsBalance;

//method

//parameterized cnstructor

public SavingsAccount(double s\_balance)

{

this.savingsBalance=s\_balance;

}

//calculate the monthly Interest

public void monthlyInterest()

{

double monthlyInterest;

monthlyInterest=savingsBalance\*(annualInterestRate/12);

savingsBalance=savingsBalance+monthlyInterest;

}

public void modifyInterestRate(double mir)

{

annualInterestRate=mir;

}

public double getBalance()

{

return savingsBalance;

}

//main method

package com.mycompany.savingsaccountobj;

public class Savingsaccountobj

{

public static void main(String[] args)

{

//saver1

SavingsAccount saver1=new SavingsAccount(2000.00);

saver1.monthlyInterest();

System.out.println("Balance is "+saver1.getBalance());

saver1.modifyInterestRate(0.05);

saver1.monthlyInterest();

System.out.println("New balance is "+saver1.getBalance());

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

SavingsAccount saver2=new SavingsAccount(3000.00);

saver2.monthlyInterest();

System.out.println("Balance is "+saver2.getBalance());

saver2.modifyInterestRate(0.05);

saver2.monthlyInterest();

System.out.println("New balance is "+saver2.getBalance());

}

}

Question 9

//main method

package com.mycompany.my\_own\_auto\_shop;

public class My\_own\_Auto\_Shop

{

public static void main(String[] args)

{

}

}

//car class

package com.mycompany.my\_own\_auto\_shop;

public class Car

{

//data

private int speed;

protected double regularprice;

private String color;

//method

public Car(int speed,double regularprice,String color)

{

this.speed=speed;

this.regularprice=regularprice;

this.color=color;

}

public double getsaleprice()

{

throw new UnsupportedOperationException();

}

}

//truck class

package com.mycompany.my\_own\_auto\_shop;

public class Truck extends Car

{

//data

private int weight;

//method

public Truck(int speed, double regularprice, String color,int weight)

{

super(speed, regularprice, color);

this.weight=weight;

}

@Override

public double getsaleprice()

{

double saleprice;

if(weight>2000)

{

saleprice=regularprice\*(1-0.05);

}

else

{

saleprice=regularprice\*(1-0.1);

}

return saleprice;

}

}

//Ford class

package com.mycompany.my\_own\_auto\_shop;

public class Ford extends Car

{

//data

private int year;

private int manufacturerdiscount;

public Ford(int speed, double regularprice, String color,int year,int m\_dis)

{

super(speed, regularprice, color);

this.year=year;

this.manufacturerdiscount=m\_dis;

}

@Override

public double getsaleprice()

{

double saleprice=super.getsaleprice();

return saleprice-manufacturerdiscount;

}

}

//Sedan class

package com.mycompany.my\_own\_auto\_shop;

public class Sedan extends Car

{

//data

private int length;

//method

public Sedan(int speed, double regularprice, String color,int length)

{

super(speed, regularprice, color);

this.length=length;

}

@Override

public double getsaleprice()

{

double discount;

if(length>20)

{

discount=regularprice\*0.05;

}

else

{

discount=regularprice\*0.1;

}

return regularprice-discount;

}

}

Question 10..

Question 10 part 1

package com.mycompany.question10;

public class Question10

{

public static void main(String[] args)

{

Shape s1=new Shape();

s1.drow();

s1.erase();

//call circle class

Circle c1=new Circle();

c1.drow();

c1.erase();

//call Triangle class

Triangle t1=new Triangle();

t1.draw();

t1.erase( )

package com.mycompany.question10;

public class Shape

{

public void drow()

{

System.out.println("Drowing the shape");

}

public void erase()

{

System.out.println("Erasing the shape");

}

}

//sub class

package com.mycompany.question10;

public class Circle extends Shape

{

@Override

public void drow()

{

System.out.println("Drowing Circle");

}

@Override

public void erase()

{

System.out.println("Erasing Circle");

}

}

package com.mycompany.question10;

public class Triangle extends Shape

{

public void draw()

{

System.out.println("Drowing Triangle");

}

@Override

public void erase()

{

System.out.println("Erasing triangle");

}

}

package com.mycompany.question10;

public class Square extends Shape

{

public void draw()

{

System.out.println("Drawing Square");

}

@Override

public void erase()

{

System.out.println("erasing Square");

}

}

//question10 Write a program to give a simple example for abstract class.

package com.mycompany.abs10\_1;

abstract public class AbstractClass

{

//create the abstract method

abstract public void name();

//create method

public void country()

{

System.out.println("country is sri lanka");

}

}

Question 10 part 3

//main class

package com.mycompany.question10\_3;

public class Question10\_3

{

public static void main(String[] args)

{

Aclass a1=new Aclass();

a1.debug();

Bclass ba1=new Bclass();

ba1.debug();

}

}

//abstract class

package com.mycompany.question10\_3;

public abstract class BaseClass

{

public void debug()

{

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

}

}

//sub class

package com.mycompany.question10\_3;

public class Bclass extends BaseClass

{

}

Question 11..

package com.mycompany.qyestion11;

public class Qyestion11

{

public static void main(String[] args)

{

MyClass m1=new MyClass();

m1.meth1();

m1.meth2();

}

}

//interface

package com.mycompany.qyestion11;

public interface A

{

public void meth1();

public void meth2();

}

//class

package com.mycompany.qyestion11;

public class MyClass implements A

{

@Override

public void meth1()

{

System.out.println("Sri lanka");

}

@Override

public void meth2()

{

System.out.println("colombo");

}

}

//example for multiple inheritance

package com.mycompany.multipleinheritance;

public class MultipleInheritance

{

public static void main(String[] args)

{

ClassA ca1=new ClassA();

ca1.country();

ca1.town();

ca1.village();

}

}

//supper class

package com.mycompany.multipleinheritance;

public class ClassA extends ClassB implements ABC

{

public void country()

{

System.out.println("Country is Sri Lanka");

}

@Override

public void village()

{

System.out.println("Village is Pitipana");

}

}

//sub class

package com.mycompany.multipleinheritance;

public class ClassA extends ClassB implements ABC

{

public void country()

{

System.out.println("Country is Sri Lanka");

}

@Override

public void village()

{

System.out.println("Village is Pitipana");

}

}

//interface

package com.mycompany.multipleinheritance;

public interface ABC

{

public void village();

}

Question 11 part 3

//main method

package com.mycompany.queston11\_3;

public class Queston11\_3

{

public static void main(String[] args)

{

Arithmetic a1=new Arithmetic();

a1.Arithmetic(5);

System.out.println("Square is "+a1.square());

ToTestInt t1=new ToTestInt();

System.out.println("square is "+t1.getSquare());

}

}

//interface class

package com.mycompany.queston11\_3;

public interface Test

{

public int square();

}

//arithmetic class

package com.mycompany.queston11\_3;

public class Arithmetic implements Test

{

int a;

public void Arithmetic(int a)

{

this.a=a;

}

@Override

public int square()

{

return a\*a;

}

}

//ToTeastInt

package com.mycompany.queston11\_3;

public class ToTestInt

{

Arithmetic arithmetic;

ToTestInt(Arithmetic arithmetic)

{

this.arithmetic = arithmetic;

}

ToTestInt() {

throw new UnsupportedOperationException("Not supported yet."); // Generated from nbfs://nbhost/SystemFileSystem/Templates/Classes/Code/GeneratedMethodBody

}

public int getSquare() {

return arithmetic.square();

}

}

Question 12

Part 1

package com.mycompany.exception\_handling1;

import java.util.Scanner;

public class Exception\_Handling1

{

public static void main(String[] args)

{

Scanner s1=new Scanner(System.in);

int a,b,c;

System.out.println("Enter the two numbers:");

a=s1.nextInt();

b=s1.nextInt();

try

{

c=a/b;

System.out.println(c);

}

catch(Exception e)

{

System.out.println("Soory");

}

System.out.println("hi");

}

}

//example for Multiple exception handling

package com.mycompany.exception\_handling2;

import java.util.Scanner;

public class Exception\_handling2

{

public static void main(String[] args)

{

//write a program for example of multiple cath

Scanner s1=new Scanner(System.in);

int a,b,c;

System.out.println("Enter the two numbers:");

a=s1.nextInt();

b=s1.nextInt();

try

{

c=a/b;

System.out.println("Answer is "+c);

}

catch(ArithmeticException e)

{

System.out.println("can not devide into zero");

}

catch(NullpointerException e)

{

System.out.println("no");

}

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

}

}

Question 13….

Part 1…….

//main class

package com.mycompany.ex\_thread;

public class Ex\_Thread

{

public static void main(String[] args)

{

/\*using runnable interface for this thread

create a object for this

\*/

A ob1=new A();

Thread th1=new Thread(ob1);

th1.start();

try

{

Thread.sleep(50);

}

catch(Exception e){}

B ob2=new B();

Thread th2=new Thread(ob2);

th2.start();

}

}

//A class

package com.mycompany.ex\_thread;

public class A implements Runnable

{

@Override

public void run()

{

for(int i=0;i<10;i++)

{

System.out.println("Thank You!");

try

{

Thread.sleep(600);

}

catch(Exception e){}

}

}

}

//B class

package com.mycompany.ex\_thread;

public class B implements Runnable

{

@Override

public void run()

{

for(int i=0;i<10;i++)

{

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

try

{

Thread.sleep(600);

}

catch(Exception e){}

}

}

}

//part 2