**OOPS\_BASIC\_ASSIGNMENTS**

**Lab-Exercise-1:**

**package** com.cts.ass;

**class** Vehicles{

**public** Vehicle() {

System.***out***.println("Vehicle is created");

}

**public** **void** horn() {

System.***out***.println("Honkk..Honkk..");

}

**public** **void** breakSignal() {

System.***out***.println("Vehicle stopped!!");

}

}

**class** Truck **extends** Vehicles{

**public** Truck() {

System.***out***.println("Vehicle named Truck is created!!");

}

**public** **void** workProperty() {

System.***out***.println("It used to carry Goods and materials..");

}

}

**class** Bus **extends** Vehicles{

**public** Bus() {

System.***out***.println("Bus is created!!");

}

**public** **void** passengers(**int** num) {

System.***out***.println("This Bus has "+num+" number of passengers!!");

}

}

**class** Car **extends** Vehicles{

**public** Car() {

System.***out***.println("A vehicle named Car is Created!!");

}

**public** Car(**int** pass) {

System.***out***.println(pass+" number of passengers are there!!");

}

**public** **void** nameOfCar(String name) {

System.***out***.println("The Name of the Car is "+name);

}

}

**public** **class** Road {

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

// **TODO** Auto-generated method stub

Vehicles v1=**new** Vehicles();

v1.horn();

v1.breakSignal();

Truck t1=**new** Truck();

Bus b1=**new** Bus();

b1.horn();

b1.passengers(20);

Car c1=**new** Car();

Car c2=**new** Car(3);

c2.nameOfCar("Mercedez");

c1.nameOfCar("BMW");

}

}

**Lab-Exercise-2:**

A computer screen shot of a program

Description automatically generated

**Lab-Exercise-3:**

**package** com.cts.ass;

**class** Inheritance1{

**public** **int** addition(**int** a,**int** b) {

**return** a+b;

}

**public** **int** sub(**int** c,**int** d) {

**return** c-d;

}

}

**class** Inheritance2 **extends** Inheritance1{

**public** **int** mul(**int** n1,**int** n2) {

**return** n1\*n2;

}

**public** **void** show() {

System.***out***.println("It is an example of Multi-Level Inheritance!!");

}

}

**public** **class** MultilevelInheritance **extends** Inheritance2 {

**public** **int** mod(**int** num1,**int** num2) {

**return** num1%num2;

}

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

// **TODO** Auto-generated method stub

MultilevelInheritance obj=**new** MultilevelInheritance();

System.***out***.println(obj.addition(20, 10));

System.***out***.println(obj.mod(58, 6));

System.***out***.println(obj.mul(50, 45));

obj.show();

System.***out***.println(obj.sub(97, 25));

}

}

**Lab-Exercise-4:**

**package** com.cts.ass;

**class** Member{

String name;

**int** age;

**long** phoneNumber;

String address;

**int** salary;

**public** **void** printSalary(**int** salary) {

**this**.salary=salary;

System.***out***.println("The salary of the person is: "+salary);

}

}

**class** Employee **extends** Member{

String specialization;

**public** Employee(String name,**int** age,**long** phoneNumber,String address,**int** salary) {

**this**.name=name;

**this**.age=age;

**this**.phoneNumber=phoneNumber;

**this**.address=address;

**this**.salary=salary;

System.***out***.println("The person named "+name+"."+age+" years old.having a salary of "

+salary+"and his address and contact no is "+address+","+phoneNumber+"respectively");

}

}

**class** Manager **extends** Member{

String department;

**public** Manager(String name,**int** age,**long** phoneNumber,String address,**int** salary) {

**this**.name=name;

**this**.age=age;

**this**.phoneNumber=phoneNumber;

**this**.address=address;

**this**.salary=salary;

System.***out***.println("The person named "+name+"."+age+" years old.having a salary of "

+salary+"and his address and contact no is "+address+","+phoneNumber+"respectively");

}

}

**public** **class** MemberAll {

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

// **TODO** Auto-generated method stub

Member father=**new** Member();

father.printSalary(1\_00\_000);

Employee eSon=**new** Employee("Rakesh", 22, 934824068, "Balasore", 26800);

Manager ySon=**new** Manager("Rajesh",18,50945,"Aladia", 50000);

}

}