Qu 17.

Write program in java to create a base class name for accepting Studnet Details of Science Stream with common properties.

After that create child classes of various Science Stream like (Maths, Biology, Computer, Electronics)

After that also create the another child class (Software,Hardware),(Botany,Zoology) on class like Computer and Biology

Program:

StudDetial.java;

package Inheritance;

public class StudDetail {

String name,dob,city;

int regno;

long phoneno;

StudDetail(String name,String dob,String city,int regno,long phoneno){

this.name = name;

this.dob = dob;

this.city = city;

this.regno = regno;

this.phoneno = phoneno;

}

void getDetail(){

System.out.println("Name: "+name);

System.out.println("Dob : "+dob);

System.out.println("city: "+city);

System.out.println("regno: "+regno);

System.out.println("phoneno: "+phoneno);

}

}

Maths.java;

package Inheritance;

public class Maths extends StudDetail{

int deptid=01;

String course="Maths";

double cgpa;

public Maths(String name, String dob, String city, int regno, long phoneno,double cgpa) {

super(name, dob, city, regno, phoneno);

this.cgpa = cgpa;

}

public void getMathDetail(){

super.getDetail();

System.out.println("Deptid: "+ deptid);

System.out.println("course: "+ course);

System.out.println("cgpa: "+ cgpa);

}

}

Electronics.java;

package Inheritance;

public class Electronics extends StudDetail {

int deptid = 110;

String course = "electronics";

double cgpa;

public Electronics(String name, String dob, String city, int regno, long phoneno,double cgpa) {

super(name, dob, city, regno, phoneno);

this.cgpa = cgpa;

}

public void getEcDetail(){

super.getDetail();

System.out.println("Deptid: "+ deptid);

System.out.println("course: "+ course);

System.out.println("cgpa: "+ cgpa);

}

}

Computer.java;

package Inheritance;

public class Computer extends StudDetail {

int deptid=102;

String course="computer";

public Computer(String name, String dob, String city, int regno, long phoneno) {

super(name, dob, city, regno, phoneno);

}

public void getCompDetail(){

super.getDetail();

System.out.println("Deptid: "+ deptid);

System.out.println("course: "+ course);

}

}

Hardware.java;

package Inheritance;

public class Hardware extends Computer {

String course\_div="Computer\_Hardware";

double cgpa;

public Hardware(String name, String dob, String city, int regno, long phoneno,double cgpa) {

super(name, dob, city, regno, phoneno);

this.cgpa = cgpa;

}

public void getHDetail(){

super.getCompDetail();

System.out.println("course\_Division: "+ course\_div);

System.out.println("cgpa: "+ cgpa);

}

}

Software.java;

package Inheritance;

public class Software extends Computer {

String course\_div="Computer\_Software";

double cgpa;

public Software(String name, String dob, String city, int regno, long phoneno,double cgpa) {

super(name, dob, city, regno, phoneno);

this.cgpa = cgpa;

}

public void getBZDetail(){

super.getCompDetail();

System.out.println("course\_Division: "+ course\_div);

System.out.println("cgpa: "+ cgpa);

}

}

Biology.java;

package Inheritance;

public class Biology extends StudDetail {

int deptid=101;

String course="Biology";

public Biology(String name, String dob, String city, int regno, long phoneno) {

super(name, dob, city, regno, phoneno);

}

public void getBioDetail(){

super.getDetail();

System.out.println("Deptid: "+ deptid);

System.out.println("course: "+ course);

}

}

Botony.java;

package Inheritance;

public class Botony extends Biology {

String course\_div="Biobotony";

double cgpa;

public Botony(String name, String dob, String city, int regno, long phoneno,double cgpa) {

super(name, dob, city, regno, phoneno);

this.cgpa = cgpa;

}

public void getBBDetail(){

super.getBioDetail();

System.out.println("course\_Division: "+ course\_div);

System.out.println("cgpa: "+ cgpa);

}

}

Zoology.java;

package Inheritance;

public class zoology extends Biology {

String course\_div="Biozoology";

double cgpa;

public zoology(String name, String dob, String city, int regno, long phoneno,double cgpa) {

super(name, dob, city, regno, phoneno);

this.cgpa = cgpa;

}

public void getBZDetail(){

super.getBioDetail();

System.out.println("course\_Division: "+ course\_div);

System.out.println("cgpa: "+ cgpa);

}

}

Demo.java;

package Inheritance;

public class Demo {

public static void main(String arg[]){

Maths mstudent=new Maths("Anuya", "15/2/1995", "chennai", 100 , 852136458 ,8.0);

Electronics estudent=new Electronics("Dharanya", "19/2/1994", "Tirunelveli", 101 , 752136458 ,7.1);

Hardware hstudent=new Hardware("Abi", "15/12/1995", "Virudhunagar", 102 , 522136458 ,9.2);

Software sstudent=new Software("Krish", "02/11/1995", "Kanniyakumari", 103 , 952112555 ,6.2);

Botony bstudent=new Botony("Revina", "17/8/1994", "Tuticorin", 104 , 777136458 ,6.5);

zoology zstudent=new zoology("cesandra", "16/8/1995", "chennai", 105 , 958886458 ,8.8);

System.out.println("-----Maths Student Detail------");

mstudent.getMathDetail();

System.out.println("-----Electronics Student Detail------");

estudent.getEcDetail();

System.out.println("-----Hardware Student Detail------");

hstudent.getHDetail();

System.out.println("-----Software Student Detail------");

sstudent.getBZDetail();

System.out.println("-----Botony Student Detail------");

bstudent.getBBDetail();

System.out.println("-----Zoology Student Detail------");

zstudent.getBZDetail();

}

}

Output:

run:

-----Maths Student Detail------

Name: Anuya

Dob : 15/2/1995

city: chennai

regno: 100

phoneno: 852136458

Deptid: 1

course: Maths

cgpa: 8.0

-----Electronics Student Detail------

Name: Dharanya

Dob : 19/2/1994

city: Tirunelveli

regno: 101

phoneno: 752136458

Deptid: 110

course: electronics

cgpa: 7.1

-----Hardware Student Detail------

Name: Abi

Dob : 15/12/1995

city: Virudhunagar

regno: 102

phoneno: 522136458

Deptid: 102

course: computer

course\_Division: Computer\_Hardware

cgpa: 9.2

-----Software Student Detail------

Name: Krish

Dob : 02/11/1995

city: Kanniyakumari

regno: 103

phoneno: 952112555

Deptid: 102

course: computer

course\_Division: Computer\_Software

cgpa: 6.2

-----Botony Student Detail------

Name: Revina

Dob : 17/8/1994

city: Tuticorin

regno: 104

phoneno: 777136458

Deptid: 101

course: Biology

course\_Division: Biobotony

cgpa: 6.5

-----Zoology Student Detail------

Name: cesandra

Dob : 16/8/1995

city: chennai

regno: 105

phoneno: 958886458

Deptid: 101

course: Biology

course\_Division: Biozoology

cgpa: 8.8

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