Day 8

1. Create a parent class for different employees with common details name, age, salary, designation, and methods to get details and display details.

package emp;

import java.util.Scanner;

class EmployeeDetails

{

public String name;

public int age;

public double salary;

Scanner sc=new Scanner(System.in);

public void getDetails()

{

System.out.println("Enter the Name:");

name=sc.nextLine();

System.out.println("Enter the Age:");

age=sc.nextInt();

System.out.println("Enter the Salary:");

salary=sc.nextDouble();

}

public void display()

{

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

System.out.println("Age is :"+age);

System.out.println("Salary is :"+salary);

}

}

package emp;

class Employee1 extends EmployeeDetails

{

public void show()

{

System.out.println("Details of Employee 1 are: ");

}

}

package emp;

class Employee2 extends EmployeeDetails

{

public void show1()

{

System.out.println("Details of Employee 2 are: ");

}

}

package emp;

public class Main {

public static void main(String[] args) {

// TODO Auto-generated method stub

Employee1 e1=new Employee1();

Employee2 e2=new Employee2();

e1.getDetails();

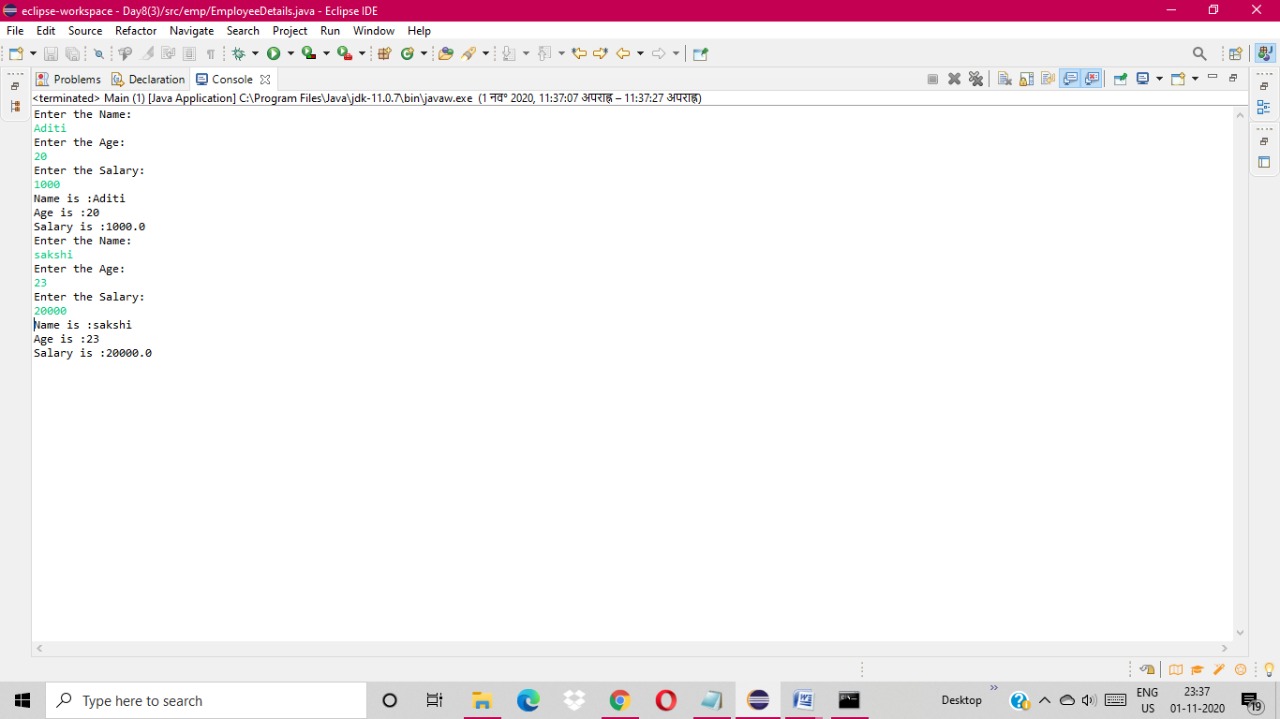
e1.display();

e2.getDetails();

e2.display();

}

}



2. Create three child classes one for the doctor, one for an engineer, and one for pilots and include their different operations in respective classes.

/\*Create three child classes one for the doctor,

one for an engineer,

and one for pilots and include

their different operations in respective classes.

\*/

import java.io.FileReader;

import java.io.IOException;

import java.io.StringWriter;

import java.util.ArrayList;

import java.util.Iterator;

import java.util.List;

class Children

{

public Children()

{

System.out.println("Class Children ");

}

public void Operationtype()

{

System.out.println("Operation type: ");

}

class Doctor extends Children

{

public Doctor()

{

System.out.println("Class Doctor");

}

public void work()

{

System.out.println("Work Done :");

System.out.println(" \t The job of a doctor is to diagnose and treat illness and injury. Doctors examine patients and arrive upon diagnosis, perform surgeries, prescribe medications, educate patients and their family members, check patients' records and keep an eye on their recovery.");

}

}

public class Engineer extends Doctor

{

public Engineer()

{

System.out.println("Class Engineer");

}

public void work()

{

System.out.println("Work Done :");

System.out.println(" \t What They Do. Engineers apply the principles of science and mathematics to develop economical solutions to technical problems. Their work is the link between scientific discoveries and the commercial applications that meet societal and consumer needs. Many engineers develop new products.");

}

}

public class Pilot extends Engineer

{

public Pilot()

{

System.out.println("Class Pilot");

}

public void work()

{

System.out.println("Work Done :");

System.out.println(" \t The Pilot's responsibilities include transporting passengers and cargo, determining the safest routes, analyzing flight plans and weather conditions, calculating fuel, and inspecting operation systems and navigation equipment.");

}

}

public static void main(String args[])

{

Pilot obj = new Pilot();

obj.Operationtype();

obj.work();

// obj.speed();

}

}

3. In the main method create an array of objects for three of them get the details and print for all the objects

public class ArrayOfObjects {

public static void main(String[] args) {

// TODO Auto-generated method stub

Car[] c = new Car[3];

c[0] = new Car();

c[1] = new Car();

c[2] = new Car();

c[0].setData(800,111);

c[1].setData(900,222);

c[2].setData(650,123);

//display the car object data

System.out.println("Car Object 1:");

c[0].display();

System.out.println("Car Object 2:");

c[1].display();

System.out.println("Car Object 3:");

c[2].display();

}

}

class Car

{

int power;

int serial\_no;

public void setData(int c, int d){

power=c;

serial\_no= d;

}

public void display()

{

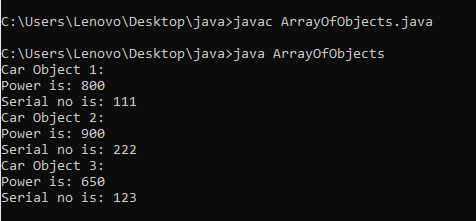
System.out.println("Power is: "+power);

System.out.println("Serial no is: "+serial\_no);

}

}

Output:-



4. Array of 3 objects for each type of employee

import java.io.FileReader;

import java.io.IOException;

import java.io.StringWriter;

import java.util.ArrayList;

import java.util.Iterator;

import java.util.List;

class Main

{

public static void main(String args[])

{

//create array of employee object

Employee[] obj = new Employee[3] ;

//create & initialize actual employee objects using constructor

obj[0] = new Employee(100,"ABC");

obj[1] = new Employee(200,"XYZ");

obj[2] = new Employee(300,"PQR");

//display the employee object data

System.out.println("Employee Object 1:");

obj[0].showData();

System.out.println("Employee Object 2:");

obj[1].showData();

System.out.println("Employee Object 3:");

obj[2].showData();

}

}

//Employee class with empId and name as attributes

class Employee

{

int empId;

String name;

//Employee class constructor

Employee(int eid, String n)

{

empId = eid;

name = n;

}

public void showData(){

System.out.print("EmpId = "+empId + " " + " Employee Name = "+name);

System.out.println();

}

}

