1. Write a program that stores the details of students and employees. The student details include first name, last name, age, course enrolled, and student ID. The employee details include first name, last name, age, salary, department name, designation, and employee ID. You need to implement the preceding functionalities by ensuring the reusability of code

import java.util.Scanner;

class people

{

static Scanner sc = new Scanner(System.in);

public void showdetails()

{

System.out.println("What is your Full Name ? ");

String name = sc.nextLine();

System.out.println("What is your age ? ");

int age = sc.nextInt();

sc.nextLine();

System.out.println("What is the profession? ");

String pro = sc.nextLine();

}

}

class student extends people

{

public void stud\_details()

{

System.out.println("This is student class \n");

super.showdetails();

System.out.println("Name of the course enroll.");

String course = sc.nextLine();

System.out.println("Enter the student ID ");

int id = sc.nextInt();

sc.nextLine();

}

}

class employee extends people

{

public void emp\_details()

{

System.out.println("This is Employee class\n");

super.showdetails();

System.out.println("Which Department are you from ?");

String dep = sc.nextLine();

System.out.println("What is your Designation");

String post = sc.nextLine();

System.out.println("Enter the employee ID");

int id = sc.nextInt();

System.out.println("what is the salary");

int sal = sc.nextInt();

}

}

public class inheritance\_homeWork

{

public static void main(String[]args)

{

student s = new student();

employee em = new employee();

s.stud\_details();

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

em.emp\_details();

}

}

1. Write a program that stores the details of the Software and Hardware books. The Software book includes the software version and software name. The Hardware book includes the hardware category and publisher. However, both the books include some common details, such as author name, title, price, and number of pages. Therefore, you need to store and display the book details by implementing the code reusability in the program.

import java.util.Scanner;

class books

{

static Scanner sc = new Scanner(System.in);

public void showdetails()

{

System.out.println("What is the name of the Author ? ");

String author = sc.nextLine();

System.out.println("What is the Title of the book ? ");

String title = sc.nextLine();

System.out.println("What is the price of the book ");

int price = sc.nextInt();

System.out.println("Total number of pages in the book ?");

int pages = sc.nextInt();

}

}

class software\_book extends books

{

public void soft\_details()

{

System.out.println("This is the details of Software Book \n");

super.showdetails();

System.out.println("What is the software version?");

int version = sc.nextInt();

sc.nextLine();

System.out.println("What is the software name?");

String s\_name = sc.nextLine();

}

}

class hardware\_book extends books

{

public void hard\_details()

{

System.out.println("This is the details of Hardware Book \n");

super.showdetails();

sc.nextLine();

System.out.println("Which category of hardware is this ?");

String cate = sc.nextLine();

System.out.println("Who is the publisher of this book?");

String pub = sc.nextLine();

}

}

public class inheritance\_homeWork2

{

public static void main(String[]args)

{

software\_book s = new software\_book ();

hardware\_book h = new hardware\_book ();

s.soft\_details();

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

h.hard\_details();

}

}