1.Write a Java program to read and display employee information name, id, gender with department name, work given with loan information, loan amount using hierarchical inheritance

```
class Employee{

   String emp_name;

   int  emp_id;

   String emp_gender;

   Employee(String name,int id,String gender){

      this.emp_name=name;

      this.emp_id=id;

      this.emp_gender=gender;

   }

   Employee(){

      this.emp_name="";

      this.emp_id=0;

      this.emp_gender="";

   }

}

class Department extends Employee{
```

```
    String emp_department;
    String emp_work_assinged;
    Department(String department,String work){
        super();
        this.emp_department=department;
        this.emp_work_assinged=work;
    }
    Department(){
        super();
        this.emp_department="";
        this.emp_work_assinged="";
    }
}
class LoanAmount extends Employee{
    double emp_amount;
    String emp_loan_details;
    LoanAmount(double amount,String details){
        super();
        this.emp_amount=amount;
```

```
        this.emp_loan_details=details;
    }    LoanAmount(){
        super();
        this.emp_amount=0;
        this.emp_loan_details="";
    }


}
public class EmployeeDetails {
    public static void main(String[] args){
        Employee e=new Employee("Manoj",109,"Male");
        Department d=new Department("FullStack", "AI Driven Nuclear Reactor");
        LoanAmount a =new LoanAmount(1000000, "MernStack");
        System.out.println();
        System.out.println("Employee name :"+e.emp_name);
        System.out.println("Employee id :"+e.emp_id);
        System.out.println("Employee gender:"+e.emp_gender);
        System.out.println("Employee department :"+d.emp_department);
        System.out.println("Employee work :"+d.emp_work_assinged);
```

```
        System.out.println("Employee fund amount :"+a.emp_amount);
        System.out.println("Employee details :"+a.emp_loan_details);
    }
}



// output
// Employee name :Manoj
// Employee id :109
// Employee gender:Male
// Employee department :FullStack
// Employee work :AI Driven Nuclear Reactor
// Employee fund amount :1000000.0
// Employee details :MernStack
```

2.Write a Java program to create a class called `Student` with the data members `usn`, `name`, and `age`. Using suitable inheritance (`usn`, `name`, `age`), create the class `UGStudent` having data members as `semester`, `fees`, `cgpa`, and `stipend`. Display the details of student information and UG details.

```
class Student{

   String student_name;

   String student_usn;

   int student_age;

   Student(){

      this.student_name="";

      this.student_usn="";

      this.student_age=0;

   }

   Student(String name,String usn,int age){

      this.student_name=name;

      this.student_usn=usn;

      this.student_age=age;

   }

}

class UGStudent extends Student{
```

```
String student_semester;

double student_fees;

double student_cgpa;

double student_stipend;

UGStudent(){

    super();

    this.student_semester="";

    this.student_cgpa=0;

    this.student_fees=0;

    this.student_stipend=0;

}

UGStudent(String name,int age,String usn,String sem,double fees,double
      cgpa,double stipend){

    super(name,usn,age);

    this.student_cgpa=cgpa;

    this.student_semester=sem;

    this.student_stipend=stipend;

    this.student_fees=fees;

}
```

```
}

public class students {

    public static void main(String[] args){

        UGStudent s1=new
          UGStudent("Manoj",19,"4NI22IS109","Third",98600.0,8.5,10000000.0);

        System.out.println("Student name: "+s1.student_name);

        System.out.println("Student age:"+s1.student_age);

        System.out.println("Student usn:"+s1.student_usn);

        System.out.println("Student sem:"+s1.student_semester);

        System.out.println("Student fees:"+s1.student_fees);

        System.out.println("Student cgpa:"+s1.student_cgpa);

        System.out.println("Student stipend:"+s1.student_stipend);


    }
}



//output
```

```
// Student name: Manoj

// Student age:19

// Student usn:4NI22IS109

// Student sem:Third

// Student fees:98600.0

// Student cgpa:8.5

// Student stipend:1.0E7
```